Jesuit-Krauss-McCormick Library
B1111 .F735
Forsyth, Thomas Miller MAIN
English philosophy : a study of its meth
3 9967 00256 7738

B1111
F73
ACCESSION NUMBER 34313
SHELF NUMBER ~~C102480~~

The Virginia Library
McCormick
Theological Seminary
of the
Presbyterian Church, Chicago.

From the _____ Fund.

RECEIVED _____

ENGLISH PHILOSOPHY

AGENTS

AMERICA . . . THE MACMILLAN COMPANY
64 & 66 FIFTH AVENUE, NEW YORK

AUSTRALASIA . OXFORD UNIVERSITY PRESS
205 FLINDERS LANE, MELBOURNE

CANADA . . THE MACMILLAN COMPANY OF CANADA, LTD.
ST. MARTIN'S HOUSE, 70 BOND STREET, TORONTO

INDIA . . . . MACMILLAN & COMPANY, LTD.
MACMILLAN BUILDING, BOMBAY
309 BOW BAZAAR STREET, CALCUTTA

ENGLISH PHILOSOPHY

A STUDY OF ITS METHOD AND GENERAL DEVELOPMENT

BY

THOMAS M. FORSYTH, M.A., D.PHIL. (EDIN.)

ASSISTANT AND LECTURER IN LOGIC AND METAPHYSICS
IN THE UNIVERSITY OF ST. ANDREWS

LONDON
ADAM AND CHARLES BLACK
1910

32250
VIRGINIA LIBRARY
MCCORMICK
THEOLOGICAL SEMINARY

B
1111
F735

PREFACE

A FEW words are necessary about the contents of this book. Its scope is sufficiently indicated by the qualification introduced in the sub-title. But the title itself perhaps calls for an explanation. It is used rather than any alternative, because what is commonly called the English method characterizes distinctively the philosophy of the English-speaking peoples, and because my subject is mainly the development of this method and the significance it has for the character of this philosophy. The headings of the chapters, again, merely designate the various aspects of the subject or lines of the general development. Anything in the nature of a history of English philosophy would require the outline filled in, to an indefinite extent, under each of them. The whole is little more than a suggestion, which it is yet hoped may be of some service to the student of philosophy, and which future workers may in one way or another utilize.

It is impossible for me to state my obligations with any degree of fulness. The book is rather an outcome of my whole reading and thinking on philosophic questions; in which a great variety of influences have had a share. My chief debt of gratitude is to Professor A. Seth Pringle-Pattison, whose teaching in philosophy gave me my start on the road of its further study, and who has taken a very kindly and helpful interest in my efforts. Of other living writers, I owe most to such different thinkers as Professor G. F. Stout, Mr. F. H. Bradley, and Mr. S. H. Hodgson.

34313

The principles which have formed the guiding lines of this Study can, in general, be referred to the work of one or other of these philosophers. To the writings of Mr. Hodgson I am indebted more particularly as regards the nature of philosophic method; to Mr. Bradley, in the general conception of knowledge and its relation to reality; and to Professor Stout, for the principle of the conative character of consciousness. A few other acknowledgments are made, on special points, in footnotes.

My quest of truth amidst the conflict of philosophic opinion has yielded me, as definite outcome, at least the conviction that these — the experiential method, the fundamental identity of experience and reality, and the relativity of knowledge generally to life or practice—are equally essential aspects of it, and that the way to further truth lies somehow in their union. Some such 'voyage of discovery' as the present inquiry was a necessity for me before I could get a foothold for any more specialized investigation. This is my plea on behalf of what might otherwise seem, notwithstanding its generality, a somewhat ambitious enterprise.

A portion of the following treatise has already been published in the form of two articles in *Mind* (N.S., vols. xiii and xvi). The parts that deal more especially with the subject of Method were, in their original form, my Thesis for the Doctorate in Philosophy at Edinburgh. The rest is new; and the plan of the whole has been remodelled. It is incidental to the mode of treatment adopted that there should be a certain amount of redundancy: I have sought to minimize this as far as possible. The index of the authors treated of or cited, along with occasional cross-references given in the footnotes, will enable the reader to bring allied passages together.

St. Andrews,
February, 1910.

CONTENTS

CHAPTER PAGES

I. Introductory: the Significance of Method - 1–7

The development of philosophy essentially a development of method, 1. Examples from the general history of philosophy, 2. The significance of this, 3. Each particular development characterized by its own method, *ib.* Relation of such movements to one another, 4. Nature of the development of English philosophy, 5. The English philosophy distinctively the philosophy of experience, 6. Scope of the following inquiry, 7.

II. The Unity and Differentiation of Knowledge - 8–21

Francis Bacon, 8. The fundamental principles of his philosophy, *ib.* Its design, 9. Its practical spirit, *ib.* This a characteristic feature of English philosophy, 10. Bacon's plea for recognition of the unity of knowledge, 11. His survey of the sciences, *ib.* The means of their advancement, 12. The need of universality, 13. Bacon's conception of philosophy, *ib.* His use of analogy, 15. Its import for the progress of knowledge, 16. Conception of a serial order of the sciences, 17. Meaning of this, 18. The logical significance of historical priority, *ib.* Unity both the starting-point and the goal of differentiation, 20. Transition to the formulation of scientific method, 21.

III. The Twofold Aspect of Method - - - 22–44

Bacon's philosophy his conception of the experiential method of knowledge, 22. Proper and improper generalization, 23.

CHAPTER PAGES

The 'anticipation' and the 'interrogation' of nature, 25. Bacon's doctrine of 'idola,' 26. Its significance, *ib.* The principles of his method expressed in its details, 28. Bacon's undervaluation of hypothesis, 30. The importance of hypothesis throughout scientific inquiry, 31. The ideational character of knowledge, 33. Deduction the counterpart of induction, 34.

Thomas Hobbes, 35. His account of philosophy and its method, *ib.* Emphasis on the conceptual aspect of scientific procedure, 37. His view of concepts and inference, 38. Criticism of this view, 39. The inadequacy of an abstract method, 41. This exemplified in Hobbes's system, 42. The defect correlative to that of Bacon's method, 43. Identity in aim of Bacon and Hobbes, *ib.*

IV. Experience the Basis of Knowledge - - 45–81

The distinctively philosophic problem in Hobbes, 45. The nature and origin of knowledge, 46. John Locke, 48. The purpose of his inquiry, *ib.* The conception of philosophy presented by Hume, 50. Philosophy the foundation of the sciences, 51. The fundamental problem of knowledge that of its own character and import, 52.

All knowledge derived from experience, 53. Locke's conception of experience, 54. Ideas as passive objects of knowledge, 55. Distinction between material and process of knowledge, 56. Ambiguities in Locke's doctrine, 57. The underlying dualism of mind and matter, 58. The representational theory of knowledge, *ib.* Primary and secondary qualities, 59. Conception of a substrate of qualities, 60. Significance of Locke's doctrine, 61. Criticism, 62. Ideas at once contents and functions of knowledge, *ib.* Bishop Berkeley, 63. No material substrate of perceptible qualities, 64. *Esse* is *percipi*, *ib.* Ideas as real things, 65. The design of Berkeley's philosophy, 66. His distinction between mind and ideas, *ib.* Result of this antithesis, 68. Ideas as presentations and as arbitrary symbols, 69. Want of coherence in Berkeley's philosophy, *ib.* David Hume, 70. His criterion for the validity of interpretative concepts, *ib.* His account

CHAPTER PAGES

of relations, 71. Of causality, 73. Of substance, material and mental, *ib.* The purport of his criticism, 74. His conception of ideas as 'distinct existences,' 75. Merit and demerit of his philosophy, 76. Summary of the development from Locke to Hume, 77. Its methodological significance, 78.

V. The Implications of Experience - - - 82–109

Thomas Reid, 82. His antagonism to Hume's conclusions, 83. The process not identical with the object of knowledge, 84. Reid's antithesis of ideas and qualities, 85. His theory of suggestion, 86. Sir W. Hamilton's argument for existence ulterior to consciousness, 87. Significance of this view of experience, 88. Knowledge intrinsically objective as well as subjective, 90. The assumption involved in the intuitional doctrine, *ib.* The modification of method implied in Reid's criticism of the preceding development, 92. Hamilton's statement of this, 93. Inadequacy of their position, 94.

The associational philosophy, 95. J. S. Mill's criticism of Hamilton, 96. Antithesis of original and acquired consciousness, 97. Mill's method, 98. His account of matter, and of mind, 99. The inherent subjectivity of his doctrine, 101.

J. F. Ferrier, 102. His doctrine of philosophic method, *ib.* The first question in philosophy, 104. The nature of knowledge, 105. The consequent character of existence, *ib.* Ferrier's opposition of thought and sense, 107. Defectiveness of his procedure, *ib.*

VI. Knowledge as Significant of Reality - - 110–133

The conception of the limits of knowledge, 110. The premisses for a sceptical conclusion, 111. The issue in Locke, Berkeley, and Hume, 112. The counter statement of Reid and Hamilton, 114. The conclusion from their own premisses, 116. Mill's assertion of the inexplicability of consciousness, 117. Its significance, 118. Hamilton's doctrine of the unconditioned, 119. Modified acceptance of this by Herbert Spencer, 121. Criticism of their position, 122. The

CHAPTER PAGES

general argument against unknowable reality, 123. Present phase of the question, 125. Summary of the foregoing discussion, *ib.* Result so far, 127.

The connexion of the agnostic with the positivist view of knowledge, 128. Spencer's definition of philosophy, *ib.* His classification of the sciences, *ib.* Their interdependence, 129. Their systematization, *ib.* Deficiency of his conception, 131. A system of knowledge implies a knowledge of reality, 132. Import of this, 133.

VII. Experience the Material of Reality - - 134–161

The next stage in the development, 134. Idea and thing correlative aspects of experience, *ib.* Recapitulation of Ferrier's argument, 135. The defect in his philosophy, 136. Its true import, 138. John Grote, 139. His expression of the philosophic standpoint, *ib.* Philosophy distinguished both from psychology and from epistemology, 140. 'The *basal* fact' the concrete unity of knowledge and existence, 142. The nature of experience, *ib.* Its aspects of mediacy and immediacy, 143. The unity and differentiation of subject and object, 144. Character and implications of this conception of experience, 146. Transition to a further phase of the problem, 147.

T. H. Green, 147. Knowledge and reality involve an identity of principle, 148. Their progressive correlation, 150. Nature of the process of finite experience, *ib.* Green's view of sentience, 151. Criticism of this view, 152. Truth and error in Green's doctrine, 153. F. H. Bradley, 155. The relational character of knowledge, 156. Its basis of immediacy, *ib.* Knowledge at once phenomenal and real, 157. Identity of reality with experience, 158. The complement of knowledge expressed in feeling and will, 159. Reality one infinite experience, 160. Outcome of Bradley's philosophy, 161. The next question, *ib.*

VIII. Knowledge as Relative to Practice - - 162–184

The practical aspect of experience, 162. Bacon's insistence on the applicability of genuine knowledge, *ib.* His conception

CHAPTER PAGES

of the purpose and the proof of knowledge, 163. Hobbes's statement, 164. The problem in Locke's philosophy, 165. Conflicting tendencies of his thought, 166. The breach between theoretic and practical validity, 167. Berkeley's view of knowledge, 168. Hume's conclusion, 169. Significance of his position, 170. Reid's assertion of instinctive beliefs, 171. The antithesis of knowledge and practical belief in Hamilton's doctrine, 172. This conception unwarranted, 173. The claims of the indefinite, *ib.* Knowledge, as such, phenomenal of reality, 174. Bradley's position, *ib.* The divergence of truth and practice, 175. The pragmatist theory of knowledge, 176. Its significance, *ib.* Knowledge and will complementary to each other, 178. The teleological character of knowledge, *ib.* Action presupposes and tests belief, 179. Knowledge and action alike based on feeling, 180. Meaning of the relativity of knowledge to practice, 181. The pragmatic method, 182. Its outlook on reality, 183. Statement of result, 184.

IX. Experience as Appreciation of Reality - - 185-212

The concluding phase of the inquiry, 185. S. H. Hodgson, *ib.* His account of philosophic method, 186. Problems of nature and origin, 187. Distinction of philosophy from psychology and epistemology, 188. Hodgson's analysis of experience, 189. The reflective character of consciousness, 190. Consciousness as knowledge and as existence, *ib.* Hodgson's philosophy as developed from this starting-point, 191-6. Consciousness the evidence of existence, 191. Its factual occurrence, *ib.* Matter = non-conscious reality conditioning consciousness, 192. Source of this conception, *ib.* Proof of its validity, 193. Summary of the relation between consciousness and matter, 194. Conception of supra-material reality, 195. The merit of Hodgson's philosophy, 196. Its assured outcome, *ib.* Need of modification, 197. Main points in criticism, *ib.* Materialism *v.* idealism, 198. Hodgson's realism, 199. Its inadequacy, *ib.* His doctrine of matter, 201. This not warranted, 202. Integration of experience and reality, 203. The distinction of nature and genesis, 204. The character of their

CHAPTER PAGES

conditioning, 205. Individual agency a factor in experience, 207. Reality an infinitely individualized experience, 208. Hodgson's severance of knowledge and practice, 209. The present problem of philosophy, 210. The correlation of knowledge and will, *ib.* Their union in *appreciation*, 211. Relation and distinction of experience and reality, *ib.*

X. Conclusion: the Character of the Philosophy of Experience - - - - - 213–228

The unity of philosophy and science, 213. Their community of method, 214. The foundation on experience and the criticism of assumptions, 215. The correlation and application of inquiries, 216. The character and function of philosophy, 216-26. Its experiential method, 216. Nature of this method, 218. The distinctification of inquiries, 219. Each science based on a definite presupposition, 220. Philosophy the attempt to avoid presuppositions, 221. Its function (1) to place the sciences, 222. And (2) to systematize their conclusions, *ib.* Philosophy logically anterior as well as posterior to the sciences, 223. Its task peculiarly experiential, 224. The reciprocity of philosophy and science, 225. Summary statement of their relation, 226. The significance of the experiential method, *ib.* The points of paramount importance in the development of the experiential philosophy, 227. The spirit of this philosophy, 228.

Index - - - - - - - 229-231

ENGLISH PHILOSOPHY

CHAPTER I

INTRODUCTORY: THE SIGNIFICANCE OF METHOD

THROUGHOUT the history of philosophy each successive phase of thought has claimed to be an advance on those which preceded it, not only in respect of the truth set forth in its conclusions, but also in the *method* whereby its conclusions have been attained. Nor is the coincidence a casual one, for the advance in method has always been considered the precondition of the increased attainment of truth. Such errors as previous systems of thought seemed to contain, and their failure to reach more adequate conclusions, have been regarded as due, above all, to some defect in their mode of conceiving or of assailing philosophic problems. To correct such deficiencies, and by this means to put us in the *way* of better results, has been the foremost claim made at every new step that philosophy has taken. Each different phase in the history of philosophy is thus primarily the forging of a new instrument for the attainment of truth, or the reforging of an old one; and the philosophic development is a progress in outcome or content of knowledge coincident with, and dependent on, advance in the method by which the results are obtained.[1]

[1] *Cf.* Adamson, *Development of Modern Philosophy*, vol. ii, p. 98: "A new method is characteristic of every great advance in philosophical thinking." Lewes's *History of Philosophy*, notwithstanding its hostile attitude towards the subject, gives prominence to the same truth.

Examples of this principle in the general history of philosophy are not far to seek. The whole modern movement in philosophy on the Continent begins with a treatise on method. Indeed Descartes not only puts method in the forefront of his thinking, he asserts that the question of method is the determining question in philosophy—the one on our answer to which all other knowledge depends. Once the correct method is apprehended, the rest of the work (he thinks) will readily follow and the conclusions reached will be both uniform and certain.[1] Similarly, Kant views his epoch-making investigation as presenting, not an entire system of knowledge, but a new conception of its method,[2] and the entrance of philosophy on 'the sure path of science' as awaiting only the discovery of its proper tasks and mode of procedure. In ancient philosophy the same principle holds. The deepest line of demarcation in the Greek development is that between the ontologizing of the pre-Socratic thinkers and the critical inquiries of Plato and Aristotle, and this line is marked by the appearance of Socrates's 'conceptual' method. The Socratic method has its most obvious significance in giving expression to the interrogatory or tentative character of all investigation. But this is only one aspect of its meaning. In its deepest import it represents the transition from the investigation of things 'in themselves' to the study of our apprehension of things, or their interpretation through our various modes of conceiving them.[3]

The fact that the problem of method has been a funda-

[1] *Discours de la Méthode*, pt. i; *Regulæ ad Directionem Ingenii*, reg. 1, 4, and 8. *Cf.* N. Smith's *Studies in the Cartesian Philosophy*, pp. 23-6.

[2] "Sie (die Kritik der reinen Vernunft) ist ein Tractat von der Methode, nicht ein System der Wissenschaft selbst" (*Krit. d. r. V.*, Preface to second edition).

[3] *Cf.* Plato, *Phædo*, 99*d*-100*a*.

mental one at the various stages in the development of philosophy, and that a reconsideration of method has always been regarded as an essential feature in its progress and an indispensable condition of better results, indicates that philosophy and its method are indissolubly connected. It is not as though the method were a question by itself, and apart from it there might be some advance in the conclusions reached. On the contrary, the intimacy of the connexion raises the presumption that philosophy and philosophic method are not so much two things as one, or at least that the question of method is not a mere preliminary, but an integral part of philosophy itself.

The design of the present essay is to study the nature of philosophic method and of the correlated conclusions as they are presented in a particular example of philosophic development. "All systems of philosophy," it has been said, "are only the development of a single philosophy."[1] Similarly it may be said that each different course of philosophic development is but a special instance of the unfolding of the principles of the one philosophy that works itself out in all. Whatever are the differences between philosophic systems, they present themselves to the sympathetic student as so many aspects or portions of a whole. And the various courses which the history of philosophy has taken in different periods and countries likewise exhibit in common certain general principles, of which they are thereby shown to be particular cases. To this community underlying the oppositions of philosophy generally, the variations in method are no exception. Rather does every method appear to be a

[1] Erdmann (following Hegel), *History of Philosophy* (English translation), vol. i, Introduction, § 5. *Cf.* Ferrier's remark: "The history of philosophy is philosophy itself taking its time" (*Lectures on Early Greek Philosophy*, § 1).

part or a partial expression of a single method. And the special correlation of method and doctrine exhibited in any one development is incidental to the peculiar genius of that development itself. A parallel can easily be traced, for example, between the course of modern philosophy in this country and on the Continent from Bacon and Descartes respectively; the differences between the corresponding stages in the two developments reflecting in greater or less degree a single general distinction, which marks the two movements as complementary to each other—processes starting from different sides, but advancing towards the same goal.[1]

It would seem to be not unreasonable, therefore, to take one development as illustrative of all. If we can discover the essential features in one process of philosophic development, we shall have gone far on the way towards seeing the significance of any such development. Moreover, the principle that makes one sequence of doctrines typical of all, likewise supports the prior idea of studying the character and connexions of philosophic systems by reference to their development. For it is only in so far as any particular doctrine or standpoint gives proof of being able to adapt itself to a variety of conditions and applications that it vindicates itself as a sound and valuable conception; and it is in the substantial identity underlying the modification which such variations entail that its essential character is disclosed. There seems ample warrant, then, for seeking the principles of philosophic method and development in one specific historical evolution. If, in a concrete case of philosophic development, procedure and results disclose themselves as throughout conditioning and modifying each other, so that

[1] It is sufficient to point by way of illustration to the difference, yet withal similarity, of the work of Berkeley and Leibniz, or again of Hume and Kant.

the evolution is equally one of doctrine and of method, and the process is towards a standpoint for which these become fundamentally *one*, we shall at least have a suggestion in favour of concluding that this relation between philosophy and its method is an inalienable character of philosophy in general ; and we shall also be confirmed in the conception that different courses of development are but complementary modes of procedure, working out in the end to kindred results. This more general conclusion, however, it does not belong to the scope of the following chapters to do more than indicate.[1] Their main purpose is to sketch one particular historical development.

In no portion of the history of philosophy is the relation between method and doctrine more interesting and instructive than in the English development. The English philosophy may be taken as forming a single movement within the wider movement of modern philosophy as a whole. The character and significance of its starting-point and mode of procedure are such that these have come to be regarded as constituting the distinctively English method in philosophy. But this method has its own stages and advances. Within their general agreement the several exponents of English philosophy present differences of standpoint, which proclaim variance in the particular view that is taken of philosophic method.[2] The course of development is

[1] *Cf.* Chapter X, p. 217, for a short statement of this point.

[2] See, for illustration of the underlying agreement, Reid's statements as to the method of his predecessors in English philosophy : " They have put us in the right road—that of experience and accurate reflexion." Their procedure " is the only one by which any real discovery in philosophy can be made " (Works, ed. Hamilton, vol. i, pp. 97, 101). And as an expression of divergence from a previous standpoint, Hamilton's distinction between the methods of observation of the facts of experience and investigation of its necessary implicates (*Lectures on Metaphysics*, vol. ii, p. 193). *Cf.* below, pp. 82, 93.

marked by growing insight into the meaning of the starting-point and procedure that characterize the movement as a whole. And variations in the doctrinal conclusions that are reached are the outcome of these differences of standpoint and method. The philosophic development in its varying phases is thus the correlate of a methodologic advance. Procedure and results alternately influence each other, so that in each reaction and counter-reaction doctrine and method are mutually involved. The development of method in English philosophy consists in the gradual working towards a wider and more adequate viewpoint, by the removal of presuppositions that unduly limit the starting-point and warp the procedure and conclusions. Yet this removal of assumptions is not a reversal, but a true evolution of the original standpoint and method. The later point of view *is* the earlier, rid of erroneous or irrelevant presuppositions, and come through trial and conflict to a fuller knowledge of itself. And as this methodologic development proceeds it becomes evident that the conclusions are essentially related to the method—that the method is not only an instrument for attaining conclusions, but is itself a portion and even a foreshadowment of the result.

To turn this abstract statement into a concrete one: Nothing is more characteristic of English philosophy than the insistence, on the part of each of the thinkers in turn, that his system is grounded on *experience*. However they differ from one another either in their fundamental tenets or in points of detail, they agree that philosophy consists in reflexion on, or interpretation of, experience. The one common feature throughout the variations of English philosophy is this insistence on experience as the ultimate starting-point and basis. This constitutes an element of agreement underlying its oppositions. The

antagonisms of doctrine reflect differences in methodologic standpoint, and these diversities of method are differences of view as to what the foundation on experience implies. The various modes of inquiry—the various ways of setting about the establishment of a body of philosophic doctrine—may accordingly be regarded as severally exhibiting the view the exponent takes as to what constitutes the genuine *experiential* method in philosophy. And the several results that are reached are each a reflex of the character and implications of the precise method that is followed. Briefly, the stages of English philosophy are steps in the discovery of what is involved in the principle that experience is the basis and ultimate criterion of truth.

To trace this development from one stage to another, and to see how at each step the procedure becomes modified, while yet retaining its fundamental meaning and gradually enlarging its character, and how the results reciprocate the method, will be to learn something concerning the nature of method in philosophy, the way in which philosophic doctrine advances along with it, and the function of philosophy in the general progress of knowledge. More particularly, it will enable us to gain some insight into the precise character of one important philosophic development, and may at the same time help to suggest further inquiry that will yield fuller and larger results.

CHAPTER II

THE UNITY AND DIFFERENTIATION OF KNOWLEDGE (PHILOSOPHY AND SCIENCE)

THE English philosophy in all its successive stages recognizes as its common origin and source of inspiration the new impulse to investigation in all departments of knowledge which marks the beginning of the modern era. Of this era the typical national spokesman is Francis Bacon. And here, at the outset, we are met by the fact that the first great English philosopher of the modern period is known pre-eminently as an exponent of *method*. The Baconian philosophy is indeed in common usage synonymous with the Baconian method. The place Bacon occupies as the first and representative English philosopher is due, above all, to his propounding a doctrine of the method of knowledge ; and his philosophy is bound up with his method of knowledge in such a way as to have become inseparable from it. What then is Bacon's philosophy ? and in what way is it identical with his doctrine of method ?

The Baconian method, like the Socratic, is usually taken as meaning primarily the inductive aspect of scientific inquiry, and its founder as concerned mainly in enforcing and expounding this, and showing its application in various fields of knowledge. But Bacon's work has a much wider and deeper significance than that which belongs to it as an exposition either of the essentials

or the details of inductive procedure in the ordinary acceptation of the term. His philosophic writings are a sustained and elaborate expression, on the one hand, of the unity of all human knowledge, and on the other, of the need of an ever renewed and revised appeal to experience as its one ultimate source. The beginning anew from experience, and the interpenetration of suggestions from the most widely sundered spheres of inquiry—these are the first principles of Bacon's philosophy. His 'new method' is the means for securing to knowledge the character of truth to experience, marked by the solidarity attaching to a connected whole.

Bacon's expressly declared task is the renovation of science. He will call men to the founding of a new and compact fabric of knowledge, which involves at once a fresh and open look at all the realms of human experience and an understanding of the significance of the work in which they severally engage as contributing to the execution of a common plan—the upbuilding of a firm edifice where every part fits into another and adds to the security of the whole. To outline such a scheme of science and show the means necessary for its attainment is his own share of the work. His writings are a series of inspiring utterances in which he expounds and illustrates what may be called a philosophy of science. In other words, the aim of his philosophy is to exhibit the *method* of *knowledge* (in the widest sense of both these terms), and to initiate a system of inquiry in accordance with it.

In enunciating the principles of a vast system of scientific inquiry, Bacon is himself inspired by the thought that the purpose of the whole undertaking is—to serve the needs and improve the condition of mankind. Knowledge, he reiterates, is the great instrument for the uplifting and advancement of man, since this can be

effected only by recognizing the inevitable conditions of existence and understanding the means of using them in the interest of human aspirations. Thus knowledge and power are coincident : truth and utility go hand-in-hand.[1] It is in his design of promoting the acquisition and application of knowledge 'to the benefit and use of men' that we find the whole spirit and motive of Bacon's philosophy, as also the key to its main principles and even to many of its details.

The conception of knowledge that has inspired English philosophy from the outset is thus intrinsically practical. It would be a fruitful field of inquiry to trace the influence or the recurrence in the work of subsequent English philosophers of Bacon's teaching as to the essentially practical nature of the aims and processes of knowledge.[2] The worth and dignity of science, in the view of Bacon and his successors, consists in its being in the highest sense useful, in its serving the great purpose of enabling the fulfilment of the wants and aspirations of mankind. The whole trend of English philosophy is in this direction. Its earnestness, its fruitfulness, its very hesitancies and self-limitations can be understood only in view of this practical tendency. What concerns us here is that at the very outset of English philosophy it is this spirit that determines its characteristic attitude and method. The experiential character of all living or efficient knowledge ; the interdependence and interaction of different

[1] "Man, the minister and interpreter of nature, does and understands just so much as he may have discerned concerning the order of nature by observation and reflexion : his knowledge and his power extend no further" (*Novum Organum*, bk. i, aphorism 1). "Human knowledge and human power coincide ; because ignorance of the cause hinders production of the effect. For nature is not conquered save by obedience : and what in contemplation stands as a cause, the same in operation stands as a rule or direction" (aphorism 3). *Cf.* 129 ; bk. ii, aphorisms 1-4).

[2] Something is done towards this in Chapter VIII.

spheres of investigation ; the conception of philosophy as essentially the basis and system of the special sciences—all these principles of Bacon's philosophy are the outcome or the expression of the inherent *applicability* of genuine knowledge. That knowledge is one in its motive or purpose and that it is one in its source or nature are facts that are inseparable.

Bacon's philosophy, then, is primarily a plea for the unity of human knowledge—as the condition and guarantee of its efficiency. What he desiderates in the existing state of knowledge is a recognized and understood connexion between its different branches. Here are avowed 'knowledges,' he says in effect, but where is knowledge ? where is science as a whole ? Only when the sciences cease from isolation and appreciate their points of contact can there be a living body of knowledge. Their efficiency depends on the possibility of amending and supplementing each by each, on each getting from and giving to the others vital suggestions and means of corroboration or correction. 'Knowledge is power' ; but the power resides in intelligent union and serviceable co-operation.

Bacon begins his philosophy, therefore, with a review of knowledge—a survey of the sciences undertaken with a view to ascertaining their connexions, their deficiencies so long as they remain apart, and their possibilities when taken together as forming a whole or system. The first part of his task, that is, is to outline a scheme of knowledge and describe its main features, both negative and positive, and the mutual relations of its parts ; while the second is to depict in detail its modes of procedure.[1] His

[1] The former is the theme of the *Advancement of Learning* and its amplified translation, the *De Augmentis ;* the latter of the *Novum Organum.*

philosophy is thus in general an attempt to supply a basis for an entire system of knowledge, and to indicate the place its various members must occupy and the function they must exercise to give strength and unity to the whole. As Kuno Fischer happily puts it, "Bacon wished to awaken life in science. Hence, above all, he had to fashion a body capable of life; that is to say, an organization in which no part should be wanting, and all the parts of which should be properly connected."[1]

Bacon's method in its widest significance means the principles by which he conceives the unity and consequent vitality of science to be attainable. If the sciences are to be unified and human knowledge organized into an efficient system, it must be according to a definite plan and method of procedure. The means—stated in the most comprehensive form—whereby such a body of knowledge can be secured consist, in Bacon's view, (1) in proceeding always step by step from one truth or from one sphere to another, making sure of the transition from one to the other, and (2) at the same time in making use of every suggestion that may serve as an intermedium between different facts or sets of facts. These are the two forms or aspects of the appeal to experience as the common and only source of human knowledge. The first involves that at each step we set aside preconceived notions and found securely on experience; the second that we make each portion of knowledge a clue to the acquisition and advancement of others. As we shall see in the next chapter,[2] these are the two aspects of Bacon's so-called inductive method of science. But they are not only the principles for the advancement of knowledge

[1] K. Fischer's *Francis Bacon*, English translation, p. 230.
[2] *Cf.* pp. 23-5, 30-1.

in the various spheres of inquiry taken separately, they are also the means of connecting the several parts of knowledge so as to form a whole.

Bacon compares the several sciences to the branches of a tree which issue from a common stem. They are all portions or divisions of 'one universal science,' from which they have been gradually differentiated. And just as the branches of a tree derive their strength from their union with the parental stock, so the vitality of any branch of knowledge depends on its being in intimate union with the whole.[1] No science, Bacon maintains, can be 'operative' or effective except through reference to the general scheme and the fundamental principles of all the sciences, since particular studies are apt to be unstable and unprofitable unless they are grounded in universality. "An error," he says, which impedes the advancement of knowledge, "is that after the distribution of particular arts and sciences, men have abandoned universality or *philosophia prima;* which cannot but cease and stop all progression. For no perfect discovery can be made upon a flat or level: neither is it possible to discover the more remote and deeper parts of any science, if you stand but upon the level of the same science, and ascend not to a higher science."[2]

This 'original or universal philosophy,' which is the 'common parent' of the special sciences, Bacon desig-

[1] *Advancement of Learning*, bk. ii, chap. v, § 2. This metaphor, expressive of the unity of the sciences and the necessity for subordinating their particularity to some kind of universality, recurs in Descartes and Comte with the same significance. "The whole of philosophy is like a tree, of which the roots are metaphysics, the trunk is physics, and the branches which grow out of this trunk are all the other sciences" (Descartes, *Principia Philosophiæ*, Preface). "The sciences are not radically separate, but all branches from the same trunk" (Comte, *Positive Philosophy*, trans. Martineau, Introduction, chap. i).

[2] *Ibid.*, bk. i, chap. v, § 5; *cf.* bk. ii, Preface, § 8.

nates primary philosophy (*philosophia prima*).[1] It is not one among the other sciences; for it is distinguished from them by its scope rather than its subject-matter, dealing as it does with the main principles of all sciences,[2] and representing rather the common path of knowledge before its partition into separate subjects. The content of this general philosophy (or general science, for Bacon uses 'science' and 'philosophy' almost synonymously) consists, he says, of such principles and conceptions as do not fall within the compass of any of the special sciences, but are common to them all, and are therefore of a higher or more comprehensive nature than those belonging especially to one particular sphere.[3] These 'common axioms' are significant of the unity and interdependence of the sciences, and constitute an important factor in their progress.

Bacon supports this general statement by exemplifying the common principles of knowledge and indicating how they may operate in the interconnexion and mutual advancement of the sciences. This forms, indeed, the chief part of his own material (as distinct from formal or methodological) contribution to the unification of knowledge. Throughout his writings there constantly occur—distinct from, though thoroughly interwoven with and illustrative of, his delineation of method—observations and principles calculated to throw light from one sphere of knowledge on another. Just as, when urging the use of experiment in scientific inquiry, he insists on the need of 'light-bringing' before 'fruit-bearing' experiments,[4]

[1] Bacon himself translates 'primitive or summary' philosophy—the two words referring to its double character of preceding the particular sciences as their origin, and resuming them as their goal.

[2] *De Augmentis*, bk. iii, chap. i.

[3] *Advancement of Learning*, ii, v, § 2; *De Augmentis*, iii, i.

[4] *Novum Organum*, bk. i, aphorisms 70, 99, 121.

so too, in the same wide spirit, he is ever seeking to catch gleams which may shed light on the most various provinces of knowledge. He notes, for example, the coincidence of the mathematical axioms about equalities with the rules of the logical syllogism on the one hand, and those of the administration of justice on the other. He points out correspondences between principles of physics and politics, of music and rhetoric, of organic and inorganic nature.[1]

Bacon thus finds the means of realizing a community of doctrine in the different sciences in the principle of analogy.[2] While warning us against the misuse of the

[1] *Advancement of Learning*, bk. ii, chap. v, § 3; *De Augmentis*, bk. iii, chap. i; *Novum Organum*, bk. ii, aphorism 27. The *Essays* also abound in such 'parallels' or 'similitudes,' as Bacon technically calls them. *Cf.* E. A. Abbott (*Francis Bacon: His Life and Works*, pp. 446, 447): "The *Essays* contain, compressed into the smallest compass, many of the best sayings of the philosophic works, based on, and occasionally illustrated by, some of the most fundamental axioms of Bacon's philosophy. But their peculiar merit is that they not only imprint on the memory a number of thoughts good in themselves and abounding in practical use, but also reveal the path by which the author arrived at them, and stimulate the reader to follow still further on that path of analogy and to reach similar thoughts for himself. For the basis of the *Essays*, as of the philosophical works, is this fundamental thought, that in social life, as in non-human nature, results can only be attained by knowing causes, and that the processes of human nature may often be not only illustrated, but even ascertained and accomplished, by the application of certain axioms common alike to animate and inanimate nature. Thus the Essay on Ambition is based upon the unexpressed axiom that 'All things move violently to their place, but easily in their place'; the Essay on Fortune has for its basis the notion that a combination of many small causes often escapes notice: 'The way of fortune is like the milken way in the sky, which is a meeting, or knot, of small stars, not seen asunder but giving light together. So are there a number of little and scarce discerned virtues, or rather faculties and customs, that make men fortunate.' Herein consists the peculiar fitness of the metaphors so richly strewn throughout the Essays: they are often more than illustrations, they are the origins of the thought which the author presents to us."

[2] *Cf.* Kuno Fischer's remark: "Fundamental philosophy, in Bacon's sense of the word, is nothing but the idea of analogy applied to the sciences" (*Francis Bacon*, English trans., p. 249).

principle by the pursuit of all sorts of fanciful analogies, he insists that real correspondences, such as are everywhere discoverable in nature and experience, are far from being chance coincidences or merely superficial resemblances ; they signify fundamental identity of character and law underlying nature's variety. " These are not," he says, " only similitudes, as men of various observation may conceive them to be, but the same footsteps of nature treading or printing upon several subjects or matters."[1] It is in virtue of such correspondences that we are enabled to unify knowledge by discovering the connexions that subsist between its several provinces, both as regards content and explanation. The detection of conformities and relations is, in fact, a prime requisite of progress alike in the separate provinces of knowledge, each for itself, and in their organization into a coherent system of truth.[2]

The function of philosophy then, in Bacon's view, is to mediate between the sciences by making effective that possibility of their final unity which is contained in their community of origin and coincidence of principle, but which is apt to be hindered rather than fostered by their growing specialization and semi-independence. The correlate of thoroughgoing particularization is ever-deepening unification, and any real and lasting progress is attainable in the interpretation of nature and experience only through a comprehensive, albeit general, view of the whole as a counterpart of detailed investigation of the parts. An insight into the general bearings and relations of particular

[1] *Advancement of Learning*, bk. ii, chap. v, § 3.

[2] *Novum Organum*, bk. ii, aphorism 27. For Bacon's suggestion of the still further extended use of analogy to unite the realms of philosophy and religion, see *Advancement of Learning*, bk. ii, chap. vi ; chap. xxv, §§ 1-7 ; and *cf.* Ellis's Preface to the *Philosophical Works*, p. 64.

phenomena and their laws Bacon esteems peculiarly characteristic of the philosophic mind, and peculiarly contributive to the advancement of knowledge. And his own genius for analogy is a case in point. Bacon's conception and use of analogy are, indeed, at once an integral part of his account of the details of scientific process and a mark of the wider import of his method and the essentially philosophic character of his work. For it is by his aptitude in detecting and suggesting such affinities that he is enabled, in all his writings, not only to enforce great truths by example and illustration drawn from every sphere, but to scatter thoughts fitted to stimulate and guide future inquiry. His philosophy is thus intrinsically a seed-field for the sciences, supplying pregnant hints to such of them as he finds 'deficient,' and anticipating those that are as yet only 'desiderate.'

There is a further point in Bacon's conception of the interconnexion of the sciences. Not only does he emphasize the value of suggestions that may lead to their closer linkage and combined progress ; he asserts a more or less definite order of progression[1] apart from which it is hopeless to expect much outcome from our labours. He maintains that the mental and moral sciences must be rooted in and nourished by the physical or natural. Indeed at times Bacon almost seems to identify 'natural' philosophy—'the great mother of the sciences'—with the 'primary' or universal philosophy which is at once the source and the bond of them all. A main cause of barrenness and want of growth in the sciences is, he says, their being severed from natural philosophy or physical science, and allowed to take their own course without the life that would be imparted to them by contact with it. "All

[1] *Cf.* Comte's conception of a 'hierarchy of the sciences' (*Positive Philosophy*, Introduction, chap. ii).

arts and sciences, if torn from this root, are trimmed perhaps and adapted to use, but grow not much." Fertility and progress are impossible "unless the principles of natural philosophy are applied to the various sciences and these in turn referred back to it."[1]

It is not impossible, however, to give a wider interpretation to Bacon's statements. His assertion that the natural sciences must precede and support the others does not convey the full significance of his conception that the sciences owe their unity and interdependence to their being based on common principles. Although he finds the seminal concepts of science in physics, he does not seek to dispense with a general or inclusive discipline and make one special science, as such, either the source or the criterion of all the rest. He distinctly maintains that the sciences form a system inasmuch as they are each and all but divergent portions of the 'main and common way' of knowledge, which logically precedes its differentiations. What is most characteristic in his contention that physics is the basal science on which the others must be built, and that apart from it such sciences as logic and ethics and politics tend to be superficial and unprogressive, is—what characterizes also, as we shall see, his theory of inductive method—his perception of the need of proceeding step by step from the rudiments of knowledge to its more advanced stages, instead of engaging on the higher to the neglect of the lower or passing from the one to the other without a proper intermedium.

It is true historically that the physical or natural sciences attain a measure of certainty and solidity before the mental and moral sciences. And what Bacon's counsels signify is that this historical priority has a logical foundation, and that its implications should be kept

[1] *Novum Organum*, bk. i, aphorisms 79, 80.

steadily in view. That what we call the lower sciences are earlier differentiated than the higher from the original unity of philosophy and science is a proof rather than otherwise that the latter, and not the former, are more akin to the fundamental discipline itself. For it implies that they can remain indistinguishable from it till a later stage of the process of differentiation is reached, and continue to perform their function in the whole, though with less individual vigour and independence, after the others have ceased to have an equal share in the common or indifferentiated work of all. But it is none the less true that as differentiation proceeds the logical implication of the historical order should be a guiding principle for connecting and advancing the sciences. This implication is, that principles that are more readily recognized and applied under abstract or general conditions are yet invaluable as a means of explicating more concrete spheres of experience, from which, moreover, they may have been originally though unwittingly drawn. This accords with Aristotle's dictum that it is necessary to begin always from cases, or aspects of fact, to which the application of a principle is in some degree evident, and proceed thence to the full significance of the principle itself.[1] And this is a maxim of method that Bacon not only accentuates in his exposition of scientific procedure but follows in his own thought. The fundamental notions and principles of the various sciences can, he holds, be rightly understood only from the point of view of their common origin in general philosophy ; but the diverse applications of these

[1] *Anal. Post.*, bk. i, chap. ii, 71*b*. For the significance of this principle of method in relation to particular inquiries, as implying that abstract conceptions and definitions can be comprehended—and justified—only through reference to the concrete details in which they are embodied, see *De Anima*, bk. ii, chap. ii, 413*a* ; *Eth. Nic.*, bk. i, chap. iv, 1095*a*, *b*.

common principles must yet be used as an ascending series of means for apprehending their true import.

There is thus no insuperable difficulty involved in reconciling the place Bacon assigns to physics as the rudimental or basal science with the function he ascribes to primary philosophy as the ' one universal science ' from which the others diverge, whatever inadequacies there are in the account he gives of the generic discipline and its precise distinction from the special sciences.[1] What is certain is, on the one side, that without an aspect of unity or community in knowledge which is logically as well as historically prior to its differentiation, it would lack the impetus ever to get sufficiently advanced for origination of the detailed work of the sciences, and similarly no ulterior unification of their results would be possible; and on the other side, that while significance for life and conduct is bound up with relation to concrete experience, the more abstract sciences (like mathematics and physics) are an indispensable guide in method, and even an anticipative suggestion of essential principles, for what are customarily regarded as the higher and more distinctively philosophical reaches of knowledge.

One main principle of Bacon's thought is, then, that there is an essential unity between the various sciences,

[1] It requires to be noted that in Bacon's terminology ' metaphysic ' is distinct from *philosophia prima*, and means the higher and somewhat problematic portion or stage of physics. He describes it as dealing with constant (*cf.* what Mill afterwards called permanent) as distinct from variable causes, and also with final causes or reasons. His account of it gives it the character partly of physics in its explanatory aspect and partly of philosophical construction on the basis of physics (*Advancement of Learning*, bk. ii, chap. vii, §§ 2-7; *De Augmentis*, bk. iii, chap. iv; *cf. Novum Organum*, bk. ii., aphorism 9). In this context Bacon likens the sciences to pyramids, each based on observational and experimental inquiries, rising gradually from the description to the connexion of phenomena, and culminating possibly in a ' summary ' law which would unite and explain their variety. Here again unity and progression are the characteristic notions.

and likewise between science and philosophy—a unity which is both the starting-point and the goal of differentiation. The particular sciences are members of a whole, or branches from a common stem, and philosophy is not so much a separate discipline as itself the unity of all the sciences.[1] The other great factor in his doctrine—which we must next consider—is his conception of the experiential method as the method of knowledge generally.

[1] We shall see in the sequel how this union of philosophy and science connects with the distinction between specifically positive or definite knowledge and the intuitions or suggestions which initiate and direct it (*cf.* pp. 133, 223 *ff.*).

CHAPTER III

THE TWOFOLD ASPECT OF METHOD

THE design of Bacon's philosophy, as we have seen, is to elucidate the means requisite for forming a systematic body of knowledge which may be gradually augmented by the attainment of further results in the various spheres, and also modified through the relation of these to conclusions already established. The first requisite is that the several branches of inquiry be recognized as only differentiated members of a common stem, and as having fibres that bind them inseparably to one another and the whole, so that any severance of them can be wrought only to the detriment of each and all. But in Bacon's view the sciences form a system or unity not only as having a common origin and definite lines of connexion ; they are one also in respect of the fundamental features of their method or logical procedure, and as all alike having their ultimate criterion in the common ground of experience. This truth is indeed the complement of the other. The concrete unity of knowledge and its common experiential method are aspects of a single principle. And Bacon's assertion of this complementary truth is equally characteristic of his philosophy. Even if we take the Baconian philosophy as primarily an exposition of inductive process, it is still true that Bacon's method gets its whole character from his conceiving of induction—and induction as he specifically expounds it—as the *method of experience.*

Both in its origin and in its details his doctrine of method owes its immediate impulse to his zeal for that ' closeness to fact ' which is the distinctive feature of an experiential philosophy. The trend of his counsels is always towards the renouncement of prepossessions and the reinvestigation of evidences—a return to experience. But what this implies is, that in fact Bacon's teaching is quite inadequately characterized by describing it as an initiation or a resuscitation of inductive procedure. It has at once a wider and a narrower character than this.

What Bacon finds predominant in the method of his predecessors is not so much a failure to recognize that the source of knowledge is experience, and its starting-point the study of concrete facts, but that they pass too hastily to generalities. Granted that they begin from particular experiences, they proceed at once to generalizations which are at best merely first approximations to truth, but which they forthwith treat as not only true but axiomatic, and appeal to with the utmost confidence in support of all their subsequent conclusions. It is this tendency towards setting up (or laying down) principles without sufficient care to see that they are well founded that distinguishes a conceptual from a properly inductive method. The conceptual method is never wholly syllogistic or deductive; but it fails of being truly experiential through resting in insufficiently established principles, and using such abstract and uncritical generalizations as the premisses for constructive arguments. In opposition to this abstract procedure Bacon urges the need of advancing step by step, constantly testing our principles by scrutinizing their application in the concrete. Only from generalizations that are carefully and methodically formed in accordance with definite rules can there be such effective inference as will really indicate fact and aid dis-

covery ; and only by such methodical procedure can our generalizations, in turn, be effectively tested. "There are and can be," he says, "only two ways for the investigation and discovery of truth. The one leaps from the senses and particulars to the most general axioms, and from these principles and their infallible truth determines intermediate axioms. This is the way now in use. The other constructs axioms from the senses and particulars by ascending continuously and gradually, so as to reach the most general propositions last of all. This is the true way, but as yet untried."[1] "Both ways," he proceeds, "begin from the senses and particulars and arrive at the most general propositions: but there is a vast difference between them. The former only touches cursorily on experience and particulars, while the latter treats them in a methodical manner ; the one lays down from the very beginning generalities which are abstract and useless, while the other rises step by step to universal truths."[2]

From this point of view, therefore, what Bacon's philosophy claims to enunciate is not so much simply the *inductive* method as the proper *method* of induction. In other words, it is in the details of inductive procedure rather than its general character that we find what is peculiarly Baconian in the method he propounds. "Bacon's method," G. H. Lewes remarks, "was not a vague formula, but a system of specific rules. He did not content himself with telling men to make observations and experiments : he told them *how* observations and experiments ought to be made. He did not content himself with stating the proper method of investigation to be that of induction founded upon facts : he distinguished

[1] *Novum Organum*, bk. i, aphorism 19.
[2] Aphorism 22 ; *cf.* 104, 125.

proper from improper inductions—the 'interrogation' from the 'anticipation' of nature."[1]

But this is only one side of the truth. The inductive method is itself only part of a larger process and outlook which constitute the deeper import of Bacon's contribution to the development of philosophy.[2] His impatience of precipitate generalities and premature deductions, even his onslaught on the whole scheme of syllogism and scholastic logic, are but features in his vast design of founding a philosophy that shall be distinctively a *philosophy of experience*. The hasty generalizations which have been made the starting-point for deductive inferences are preconceptions obstructing full and free inquiry into the experiential sources of knowledge. This acceptance of insufficiently established conclusions underlies the appeal to tradition and authority in all its forms; and is the chief occasion of that neglect of constant reference to experience characteristic of any system of doctrine that has come to substitute words for thoughts and thoughts for things. The habit of relying on prior conceptions to the neglect of fresh research Bacon calls the 'anticipation' of nature; which is the same as disdain, or at least disregard, of experience, and is opposed to the 'interrogation' or 'interpretation' of nature implied in an exhaustive method and the unbiassed quest of knowledge.[3] A patient and thorough investigation of nature —an open-minded survey of experience—this is the design of Bacon's 'new instrument.' And its initial principle,

[1] *History of Philosophy*, 2nd series, pt. i, chap. iv.

[2] *Cf.* the continuation of the passage just quoted from Lewes: "Bacon's method may be said to have two parts: the one, that precise system of rules just spoken of; the other, that wise and pre-eminently scientific spirit which breathes through his works. . . . It is this, more than his rules, which reveals to us the magnificence and profundity of his views."

[3] *Novum Organum*, bk. i, aphorism 26.

accordingly, is the renunciation of all prejudices and preconceived opinions—*idola* (as Bacon calls them), that is, appearances or apparent truths—first apprehensions which, instead of being subjected to careful scrutiny, are turned straightway into axiomatic principles or necessary truths and govern all subsequent thought.

Bacon's disquisition on 'idola,' or 'phantasms,'[1] as the great hindrances to truth, is thus a fit and natural preliminary to his account of the details of scientific method. It may be regarded as a negative or critical introduction to his own positive exposition which follows;[2] and it partakes, both in general and particular nature, of the characters that distinguish the constructive portion of his work. The whole discussion of 'phantasms' is a portrayal of erroneous method, designed to show how *not* to proceed in order to attain truth. Those appearances hindering the acquisition of knowledge are the equivalents or expressions of the precipitate conclusions which mark a defective method. In one aspect this signifies that such inadequate conclusions are incomplete inductions due to the want of definite rules for the investigation of phenomena. Bacon accordingly contrasts the method or lack of method that has served as a 'bulwark and fortress' for the errors and deficiencies of the past with the principles of the procedure he is about to delineate. He animadverts upon the practice of resting in a few ill-arranged and superficially examined instances, taking these as proofs rather than indications of a general law,

[1] *Novum Organum*, bk. i, aphorism 38 *ff*; *De Augmentis*, bk. v, chap. iv. The same subject is treated in another form in *Advancement of Learning*, bk. i, chaps. iv and v.; *De Augmentis*, bk. i. The substantial identity of treatment in these and others of Bacon's works is noted by Spedding, Bacon's *Philosophical Works*, pp. 113-7.

[2] Bacon himself says (aphorism 40): "The subject of phantasms (or anticipations) stands to the interpretation of nature as that of fallacies does to ordinary logic."

and estimating other instances according to their conformity with the principle thus laid down ; of trusting unduly to observation to the omission of experiment, and to simple enumeration in disregard of contrary instances ; and of rendering futile such experiments as are undertaken, through random and inept labour and haste to the practical application ; conjoined with a reliance on deductive arguments and the complete absence of systematic records of observations and experiments. The remedy for all which lies in cautious and graded proofs and regulated inquiries—above all, in combined and organized effort.[1] "Let men cease to wonder," he says, "if the course of knowledge is not accomplished, when they have quite strayed from the path ; either quitting and deserting experience altogether or getting entangled and wandering about in it as in a labyrinth ; whereas a determinate and orderly method would lead by a sure path through the woods of experience to the open ground of principles."[2]

But a true method of induction and the organization of science are for Bacon synonymous with a scheme of genuinely experiential inquiry. The false method, which puts inadequate induction and elaborate deductive reasoning in the place of exhaustive research, is a symbol of infidelity to experience and the elevation of abstract thought above fact in the quest for truth. Regarded in this light Bacon's doctrine of *idola* is a critique of knowledge,[3] which has for its purpose the removal of all that

[1] *Novum Organum*, bk. i, aphorisms 69, 70, 81-3, 98-106.

[2] Aphorism 82.

[3] *Cf.* Höffding, *History of Modern Philosophy*, English translation, vol. i, p. 197 : "Bacon's doctrine of 'idols' is a piece of critical philosophy—an attempt to distinguish between that which belongs to the subjective nature of knowledge and that which belongs to the universe."—With Bacon's aim and its execution should be compared those of Descartes's *Discourse on Method* and Spinoza's fragmentary treatise *De Intellectus Emendatione*.

depends only on the individual or the generic nature of different thinkers, on the tyranny of language or the currency of theories. He stigmatizes undue propensity to relate or to distinguish, to specialize or to systematize ; the proneness to be ruled by ideas or by feelings, by associations and circumstances, the authority of traditions or the attractions of novelty ; in general, the adverse influence that personal idiosyncrasies and customary opinions exert on the advancement of knowledge. His hopes for the pursuit and attainment of truth rest in the prospect of arousing a widespread disposition to abjure assumptions and prepossessions, and to learn afresh.[1] As he puts it in a concluding paragraph on the *idola* : " And now I have spoken of each kind of phantasm and its accompaniments : all of which must be renounced and discarded with fixed and solemn resolve, and the mind wholly freed and cleansed from them ; since there is no other entrance to the kingdom of man, which is founded in knowledge, than to the kingdom of heaven, into which one may not enter save in the character and spirit of a child."[2]

The details of Bacon's formulation of scientific method are his conception of the embodiment and application of the principles thus presented. As already noted, the main features of his philosophy get expression in the particular as well as in the general nature of the procedure he outlines. Thus, his conception of ' forms ' as the ' laws of action ' of phenomena, instead of the occult essences of scholastic doctrine, is expressive both of the experiential and the practical character of his philosophy. The discovery of the causal laws which govern the production of phenomena is, he says, the foundation both of know-

[1] *Cf.* Descartes's principle : " That in order to seek truth it is necessary once in the course of one's life to doubt as far as possible of all things " (*Princ. Philosophiæ*, pt. i, princ. 1).

[2] *Novum Organum*, bk. i, aphorism 68.

ledge and practice. Since knowledge and power coincide, what alone are knowable or worth knowing in nature or experience are the concrete conditions whereby human purposes may be achieved and human progress furthered.[1] And his rules for the investigation and discovery of these forms or laws are likewise conceived as the appropriate means for acquiring a body of knowledge that shall be fitted to apply the facts of experience to the needs of practical life. The specifically new or differentiating features of the process as he describes it are, according to his own view, the importance it attaches to the hitherto neglected negative or contradictory instances, and its provision for the extensive use of experiment. And these together form the means of making the investigation of experience both genuine and exhaustive ; the former providing for a critical survey in place of any mere enumeration of details, and the latter enabling the examination of phenomena under the most varied conditions.

Bacon's method therefore, in its full significance, is the expression of an unremitting appeal to experience—and from parts or aspects of experience to its total or concrete content. That renovation of science which he contemplates is to be effected by a return to experience and a new devotion to particular facts ; the trustworthiness of its discoveries is to be guaranteed by the linkage of its various portions and the comprehensiveness of its survey ; and its practical applicability is to be secured by its being grounded firmly in a wide and varied experience, and directed to the study not merely of the formal or general characters of things, but of the concrete conditions governing the production of specific results. In a word, Bacon's

[1] " Theoretical maxims and practical directions come to the same thing : what is most useful for practice is at the same time what is most true for knowledge " (*Novum Organum*, bk. ii, aphorism 4).

doctrine of science and its processes owes its character to his purpose of formulating the method distinctive of a philosophy of experience.

But while Bacon is thus bent on instituting an adequate method for the interpretation of experience, his very zeal for its thoroughness and efficiency makes his method one-sided and therefore incomplete. It tends to eliminate from the quest for knowledge processes without which no interpretation of experience would be possible. Bacon arraigns prejudice or prejudgment in all its forms, shows its varied nature and subtle influences, and determines the means of guarding against it. But he does not do justice to the necessity underlying it, which lends it a certain meaning and shows that it is the misuse of a proper instrument. For he fails to differentiate it sufficiently from the imaginative conceptions or inchoate suggestions which perform an essential function in the acquisition of knowledge, and on which science depends not only for its beginning but at every step of its progress. He urges (as it has been put) " attention, still attention, and ever repeated attention, to nature, to fact, to observation, to experiment "; but he does not recognize that the counterpart of this is those very suppositions and imaginings which his method would abolish as alien to experiential inquiry. Not that Bacon puts no stress, in his delineation of scientific method, on the use of hypotheses or provisional conceptions. On the contrary, they occupy an important, though subordinate, place in the procedure. They are invaluable as a means of marshalling facts and suggesting experiments. Such hypothetical explanations or preparative notions Bacon recognizes in his ' permission to the mind ' of an ' inchoate interpretation ' or ' first vintage ' of the subject under investigation.[1] And these

[1] *Novum Organum*, bk. ii, aphorism 20.

hypotheses are to be first suggested and then verified by recourse to ' prerogative instances ' of one kind or another which are peculiarly suited to indicate or to test them. Moreover, he emphasizes, as we saw, the value of analogies as suggesting kinship between facts. But what Bacon does not recognize is that all science is constructed out of just such prenotions and conjectural explanations, and that these are as indispensable as observation and experiment themselves ; that without them, indeed, we should have no inducement to observe and no clue whereby to experiment.

It is chiefly in his remarks on experiment that we find Bacon's genuine, if very incomplete, appreciation of this aspect of scientific process. He says in one passage : " Pure experience (*experientia mera*)—which, if it presents itself, is named chance ; if it is sought, experiment—is a mere groping like that of men who at night try all means of hitting on the right road, when it would be much better to wait for day, or to kindle a light before proceeding. But the true order of experience first kindles a light and then shows the way by means of it ; beginning from experience that is arranged and assimilated, not chaotic or vague ; deriving principles therefrom, and from principles thus established, new experiments."[1] But what is true of experiment is true of the method of knowledge as a whole. It has always the double character of suggestion and verification, or idea and fact. And it is this truth that Bacon's theory of method tends to overlook or to minimize.

The conception of scientific procedure which Bacon's

[1] *Novum Organum*, bk. i, aphorism 82. *Cf.* the distinction already referred to (p. 14) between ' light-bringing ' and ' fruit-bearing ' experiments—*i.e.*, those adapted respectively to the discovery and the application of axioms or general principles. Also *Advancement of Learning*, bk. ii, chap. vii, § 1 : " All true and fruitful natural philosophy hath a double scale or ladder, ascendent and descendent, ascending from experiments to the invention of causes, and descending from causes to the invention of new experiments."

delineation mainly suggests is that of a vast accumulation of facts, freed from all elements of theory, which shall be made to yield their own theory through an exhaustive tabulation of agreements and differences. It is a great advantage of his method, he thinks, that it tends to 'level all intellects'[1] by making facts intelligible without any interpreting insight or initiative on the part of the inquirer, or indeed any activity of mind other than that of collecting and arranging the facts themselves. But even the collection of facts presupposes a rudimentary hypothesis concerning them, and therefore some conception of their nature and their mode of connexion. There is, in fact, no genuine opposition between observation and experiment on the one hand and hypothesis or theory on the other. All investigation involves some element of suggestion or conjecture, which is the basal form of hypothesis : random observation and experiment are futile, and even strictly impossible. It is not as though hypothesis grew spontaneously by way of the accumulation and survey of facts, for it is hypothesis that establishes as well as interprets the facts; and whether our apprehension of them be meagre and tentative, or full and systematic, it always partakes of the nature of theory, and is not a mere transcript of extraneous or indifferent data. Not only, then, is hypothesis invaluable as a means of suggesting fresh lines of inquiry, and directing the precise course that observations and experiments shall take; it is the starting-point of all inquiry, and the very life of genuine scientific method. In the last resort indistinguishable from observation itself, it is at every step its indispensable counterpart; the whole movement of scientific process consisting in the progressive formation and development of hypotheses, originally tentative and

[1] *Novum Organum*, bk. i, aphorisms 61, 122.

vague and passing gradually into the precision of established theory.[1]

Bacon's onslaught against anticipatory conceptions and hypothetic deductions is thus misplaced in so far as it implies insufficient appreciation of the function of ideal construction in the acquisition of knowledge. Not only is the exclusion of supposition or hypothesis from our investigation of fact a misinterpretation of scientific process ; there are no facts to which we can appeal in the absence of hypothesis, for fact and hypothesis are much too intimately linked with each other.[2] Conceived theory and apprehension of fact are, indeed, complementary features or aspects of the process of acquiring knowledge ; and throughout the course of scientific inquiry they condition and alternately modify each other. Any piece of knowledge begins in a hint or suggestion as to the nature of some experience. This is, so far, alike a ' supposition ' and a ' fact.' And we may describe the process of knowledge as that of making determinate either a hypothesis or a fact. If the former, then in proportion as the hypothesis is rendered definite it indicates more precisely our conception of the fact that is being apprehended. If the latter, progressive apprehension or appreciation of the fact constitutes the theory as to its nature. In either case the process (which is simply the gradual fulfilment of the purpose) is the same—the characteriza-

[1] The place of hypothesis in scientific method is recognized by Mill, *Logic*, bk. iii, chap. xi, and chap. xiv, §§ 4-7 ; and Jevons, *Principles of Science*, bk. iv, chap. xxiii. The conceptual or ideational character of the process is shown by Whewell, *Novum Organon Renovatum*, bk. ii, chaps. iii-vi.

[2] *Cf.* Whewell : " The difficulty of distinguishing facts from inferences and from interpretations of facts is not only great, but amounts to an impossibility. . . . We cannot obtain a sure basis of facts by rejecting all inferences and judgments of our own, for such inferences and judgments form an unavoidable element in all facts " (*Novum Organon Renovatum*, bk. ii, chap. iii, § 2).

tion of some experience. If we take our experience as consisting of a variety of details requiring explanation, then the characterization of them must mean getting to see them as constituting in relation with one another some sort of whole or system. If, on the contrary, we take it as already partially apprehended in some conception as to its nature, the process of knowledge must consist in testing and applying this conception by exhibiting its various implications and its significance for further detail. The former is the essence of generalization or induction, the latter of deduction or verification. And these two are only different aspects of one and the same process. The one is the search for connective or interpretative principles, the other is the establishment of connexions already suggested. Both are needed to insure to our knowledge at once progress and certainty; and the alternate suggestion and confirmation of hypotheses are the means of attaining such knowledge.[1]

Thus we see that the deductive method which Bacon condemns is simply the 'inverse' aspect of the inductive procedure he extols, and that the systematic employment of hypothesis is the very means of securing that gradual and certain acquisition of knowledge which he desiderates. The deductive and inductive phases of scientific procedure together constitute the single instrument for interrogating nature or interpreting experience. Our questions must themselves be definite if they are to get significant answers; and, conversely, experience must be

[1] On the whole question of hypothesis and the relation between induction and deduction, *cf.* B. Bosanquet, *Logic*, bk. ii, chap. v; and J. Venn, *Empirical Logic*, chaps. xiv-xvi. The relation of Bacon's to Aristotle's doctrine of method is discussed by H. W. B. Joseph, *Introduction to Logic*, chap. xviii.—For the development of method and its relation to results in the progress of modern science, notably in the work of Kepler, Galilei, and Newton, see Höffding, *History of Modern Philosophy*, vol. i, especially pp. 170, 176, and 409.

made to yield its own meaning or interpretation by a progressive appreciation of what it actually is. In so far, then, as Bacon's method is disproportionately inductive to the neglect of complementary processes, and in urging recourse to 'facts' underestimates the significance of 'ideas,' it thereby fails to be an adequate representation of the method of experience.

The deductive aspect of scientific method gets full recognition in the work of the next great English thinker, Thomas Hobbes. He, like Bacon, is convinced that the first and chief requisite in philosophy is method; that its errors and failures are due to the want of a determinate procedure which shall displace conjecture by certitude, and secure a gradual progress of knowledge instead of endless variety of opinion. Like Bacon, too, he seeks by setting forth the proper method and the first principles of such a philosophy to make a preparation for its future growth.[1] But his conception of what constitutes an adequate method differs considerably from Bacon's.

Philosophy or science, says Hobbes, is reasoning concerning experience. It is based on experience, but is distinguished from it as being its reasoned interpretation, or reasoned knowledge concerning it. Or, stated from the other side, knowledge original or experience (that is, sense and memory) differs from the knowledge that constitutes science, and the mark of scientific knowledge is the evidence or certainty implied in its being reasoned or demonstrated knowledge. Again, science (or philosophy, as science universal) is a knowledge of conditions and consequences, of the dependence of facts upon one

[1] "My purpose is, as far forth as I am able, to lay open the few and first elements of philosophy in general, as so many seeds from which pure and true philosophy may hereafter spring up by little and little." —*De Corpore* (*Works*, ed. Molesworth, Latin, vol. i; English, vol. i, *Concerning Body*), chap. i, § 1.

another. The essential character of such knowledge is that it is connected knowledge ; it exhibits the connexions or consecutions of things, or explains them according to principles—the principles that govern their production. It consists in knowing concerning anything both what it is and why it is so and not otherwise. Scientific method has thus two phases : the one consists in seeing or discovering, the other in proving. We must begin our philosophy from a contemplation of experience in all its complex variety of features, and seek to detect their common aspects or general principles, which are more self-evidencing or self-explicative and in this sense more knowable, but less obvious and therefore less known. In this way we may realize what is the most general principle or the universal aspect of phenomena. Such principles must then be employed for the explanation of phenomena, and the more general principles used to account for the less general. This is the rational interpretation of experience, or the explanation of it by universal principles. These principles cannot themselves be directly proved ; they can only be indicated as at least ostensibly characterizing and determining phenomena. The proof lies in their ability to explain the phenomena. Thus, besides the contemplation of experience in order to discover principles from facts, science requires the demonstration of facts from principles, and it is this that especially distinguishes it as science. Only when things are known as determined by rational or systematic principles is the knowledge of them verified or certified knowledge. " Experience concludeth nothing universally " ; it is the function of science to generate truth that is universal and necessary, because demonstrative.[1]

[1] *De Corpore*, chap. vi ; *cf. Human Nature* (English Works, vol. iv), chaps. iv and vi ; *Leviathan*, chap. v.

The significance of this account of philosophic method lies in its distinct assertion of the twofold character of the procedure. Hobbes's view is that what is requisite is, first, by a comprehensive survey of experience, to try to apprehend the most universal principle of things; and then to deduce from it consequences which can be used to explain the production of phenomena, and to give to knowledge a demonstrative character. We have here a recognition of the place that conceptions and deductions occupy in the procedure of philosophy and science. The method implies that unless and until we have a hypothesis concerning the phenomena we are investigating, and think out the results of our hypothesis, the investigation is 'uncertain conjecture' without either proof or disproof; that systematic reasoning is accordingly a prime condition of all veritable knowledge and as indispensable to it as the observational aspect of inquiry. Yet the method, as Hobbes depicts it, is not a completely adequate view of scientific method. It leads him to despise experiment in science even while founding his doctrines on observation and experience; his conviction of the supreme importance of principles or hypotheses, of certainty as to their being 'possible and intelligible' and not of the nature of occult qualities, and of strict accuracy in our reasoning, makes him undervalue the elaborate cross-questioning of nature and experience which is characteristic of the Baconian method. And further, as we shall see presently, his conception of the nature of hypotheses and of the process of applying them in interpretation of phenomena makes it impossible to connect the two aspects of scientific method.

Hobbes's delineation of method does not, indeed, suggest that the deductive procedure enables us to dis-

pense with precise and constant reference to experience. On the contrary, for him as much as for Bacon experience is the sole source and criterion of our knowledge. Both at the outset of our investigation, in framing our hypothesis, and when we come to apply it to the phenomena belonging to any particular sphere of experience or portion of such sphere, we must proceed by way of observation and discovery. Moreover, the hypothesis is to be taken only as suggesting an explanation until the facts—in the mass and in detail—are seen to be actually conformable to it, and it is subject to being superseded by any other hypothesis with which the facts can be shown to have more accord. The point is that whatever explanation is given must be by means of some hypothesis or another; and that, so long as we are using a certain hypothesis, we must make no supposition as to the nature or production of the phenomena under investigation that is inconsistent with the implications and consequences of the hypothesis itself. But Hobbes gives an inadequate account of the character and working of the hypotheses that are to be applied in explanation of the details of experience. His view is that these conceptions or explanatory principles are of the nature of definitions, and that all reasoning is only the unfolding of the implications of definitions.[1] Now it is true that all conceptions can be looked upon as definitions; but it is not true that they are only definitions, or that reasoning consists in the explication of concepts as logical contents that can be manipulated after the manner of symbols or counters. This is how Hobbes regards them. His treatment implies that concepts are simply definitions, and that definitions are rigid contents which can be combined and worked out into their implications and consequences without being

[1] *De Corpore*, chap. vi, §§ 12-17.

modified by contact with the details to which they are applied.[1]

It is characteristic of Hobbes's method that the conceptions which operate as explanatory principles of phenomena are exemplified in the definitions and axioms of mathematics, and that mathematical procedure is taken as the type of the universal method of science. He views mathematical truths as deductions from definitions; and he extends this conception to the other sciences as well But this view of mathematics is both erroneous in itself and incapable of direct transference to other sciences. For the reasoning in mathematics requires not only the definitions but also the postulates; from the definitions alone, without the postulates—that is, without the acceptance of certain existential principles which are taken for granted as axiomatic truths or as indispensable assumptions—no system of theorems or propositions is deducible. It is only inasmuch as the definitions contain or imply certain assumptions that inferences are obtainable at all; and it is on these rather than on the definitions that the reasoning is based. These presuppositions are, in geometry, expressions of the nature of space or extension, and in arithmetic, of time or number, as determinate modes of experience. The proof of any mathematical proposition requires, along with the accepted definitions, such postulates signifying the experiential (that is, perceptual as well as conceptual) character of the basis underlying the whole system of truths. In geometry this is distinctly shown in the constructions. It is because we are able to envisage the spatial relations involved, and

[1] Hobbes even speaks of the observational and the ratiocinative portions of scientific procedure as two quite separate methods, rather than as different parts or aspects of one and the same process (*ibid.*, chap. vi, § 7; chap. xxv, § 1; chap. xxx, § 15). This could be so only if reasoning were wholly symbolic, and observation purely mechanical.

to demonstrate them by means of actual or ideal construction in accordance with our basis, that the conclusions are inferrible and demonstrable as universal and necessary truths.[1] In the sciences of number the reference to reality is less obvious, but is none the less present. As in geometrical science it is primarily the correlative discreteness and continuity of space, as a form or character of experience, that enables the construction and therefore the proof of spatial relations ; so in the arithmetical sciences the discovery and proof of numerical relations depends on the corresponding nature of time, and not merely on definitions. And even in algebra, where the use of symbols seems to make the existential import or reference completely disappear, it is not simply in virtue of the signs or mental counters themselves, but of their being signs which are or may be representative of particular things, that conclusions are obtainable by their means. In the most abstract reasoning there is involved, at the very least, the presupposition of unity and difference, or identity and variety, as complementary aspects of experience; and this means that, if it is employed at all in the interpretation of experience or investigation of reality, it cannot be wholly a matter of definitions and formal deductions.[2]

Thus the hypotheses or principles of mathematics are not, as Hobbes's view of them implies, arbitrary contents independent of all reference to actual existence. Nor is

[1] This applies equally to the geometry of four- (or, for that matter, multi-) dimensional space, which requires constructions that are at any rate not incompatible with a possible spatial experience.

[2] The nature of mathematical certainty is discussed by Mill, *Logic*, bk. ii, chaps. v and vi.—The differentiation of pure and applied mathematics (see B. Russell, *Principles of Mathematics*, vol. i, chap. i) shows clearly the presuppositional character of propositions or systems of propositions which are apt to be regarded as absolute or categorical ; but it also implies that all application of logical principles involves a reference that is not merely conceptual.

mathematical procedure solely conceptual or deductive. It works on the supposition of an experiential reference, which precludes the reasoning from being entirely abstract and hypothetic. *A fortiori*, this conception of method is inadequate when applied to the other sciences. In mathematics, the abstract or limited nature of the subject-matter gives peculiar countenance to the view that the reasoning consists in the explication of concepts, and to the assumption of the ultimate and indisputable certainty of the principles and their application. But, as we have seen, definitions or concepts are insufficient apart from constructions working in conformity with the nature of a presupposed basis. And what is thus true of the mathematical sciences is similarly true in regard to knowledge generally, with whatever special aspect of experience it is concerned. From definitions alone, or from conceptions taken as arbitrarily completed contents that are not subject to ulterior conditions, no transition is possible to the concreteness and variety of phenomena. The reasoning requires a tacit, if not an overt, reference beyond the definitions to the actual or assumed nature of some sphere of reality or another; and it is through the interplay of conception and existence that the interpretation of experience advances. Without a presupposed medium or material of one sort or another, with reference to which the conceptions get their content, and in view of which these contents are liable to modification, as well as capable of application, no development of knowledge is attainable. Accordingly, any principle we use in interpretation of experience must be treated, not as a fixed concept, but as partaking more or less in the flexibility of the concrete details by which it is suggested.

Still more does this become apparent when we endeavour to pass from one aspect of experience to another. For

we are then not only limited by the conditions implied in the postulate or presupposition defining one order of facts, but by the relations between the natures of the different spheres. To this task the abstract conceptual method is totally inadequate. It either fails altogether to effect the passage or does so only by neglecting the distinctions between the various aspects of fact. It is here that the deficiency of his method shows itself in Hobbes's own work. The concept of motion, which is the hypothesis he employs, is simply transferred without modification to one sphere of experience after another in explanation of their multiform phenomena. But the inevitable result of transferring, without any sort of modification, the principles of mechanics and physics to psychology and ethics and sociology is that the differences of the phenomena are sacrificed to their partial agreement. In any such procedure distinctions tend to be disregarded in favour of an abstract unity. Instead of this, what we require is a conception of method such as shall provide against undue rigidity of our hypotheses or interpretative principles; which involves, we have seen, the free interplay of idea and fact, or of form and material of experience.[1]

While, therefore, Hobbes's method implies that deduction has a place no less important than induction in

[1] For the general principle of the reciprocity of analysis and synthesis, and the need of their being supplemented by a principle of suggestion and development, *cf.* F. H. Bradley, *Principles of Logic*, bk. iii, pt. i, chap. vi, §§ 25-35. "Analysis is the synthesis of the whole which it divides, and synthesis the analysis of the whole which it constructs." "The more deeply you analyze a given whole, the wider and larger you make its unity; and the more elements you join in a synthetic construction, so much greater is the detail and more full the differentiation of that totality" (*l.c.*, pp. 431, 447). "Inference is an experiment, an ideal experiment which gains fresh truth. . . . The datum, with which we begin, must survive through the process. It must go into the experiment, and must appropriate the result which that experiment obtains" (pp. 452, 453).

scientific procedure, and thus serves to correct the deficiency of the Baconian conception, it is itself chargeable with a corresponding inadequacy. Hobbes, as well as Bacon, fails to recognize that truth is ascertained only by the alternate reaction of 'principles' on 'facts' and 'facts' on 'principles'; that the nature and certainty of principles, as well as the explanation of facts, can be established only by proceeding gradually as supposition and application throw light on each other; or, that the verification which scientific knowledge implies, involves the progressive modification and mutual adjustment of the hypothesis used to interpret the facts and our apprehension of the facts that are being interpreted.

But notwithstanding the contrast between Hobbes's conception of method and Bacon's, there is a fundamental identity of principle in the work of the two philosophers. The aim of both is to lay down the principles of a thorough unification of knowledge, and the difference in their methods is an expression of the different means they consider requisite for enabling such unification. What Bacon thinks to secure by a gradual progress from the less to the more general through intermediate conceptions, and so by a careful and methodical employment of the inductive process, Hobbes regards as requiring above all a thoroughgoing deductive argument from the most universal principle ascertainable. These are, as has been shown, complementary conceptions, and the whole difference lies in the stress that is put on the one side or the other. The same desire for unity of process in the sciences and effective linkage of their principles leads Bacon to urge the need of making sure of the intermediary or connecting notions, and Hobbes to emphasize the orderly and inflexible application of the fundamental principle. Hobbes finds the most universal

principle of things in the idea of motion, and accordingly his mode of connecting the sciences is the systematic development of the consequences of this hypothesis. By making this one idea the basis of his philosophy, and applying it consistently in explanation of the phenomena in the successive spheres of experience—the physical, the psychical, and the social—Hobbes seeks to accomplish that correlation of the parts of experience essential to its reconstruction as a concrete whole, which is the design of Bacon's classification[1] and interconnexion of the sciences. The procedure he employs, while illustrating on a large scale the use of hypothesis, and being indeed itself of the nature of a huge experiment, has the defect that Bacon ascribes to all prenotions—that if, or in so far as, the principle is itself an abstraction from the concreteness of experience, it cannot prove adequate to the interpretation of the whole. The abstractness of Hobbes's method, and his complete disjunction of the ratiocinative and observational processes, allow no means of modification of the hypothesis as it encounters the characteristic differences of the various parts or aspects of experience. Nevertheless his procedure has quite the same aim as that of Bacon —the unification of knowledge by the employment of a common method over the entire realm of experience. We have now to see the experiential method applied to the problem of the ultimate nature and evidence of knowledge itself.

[1] Hobbes's scheme of the sciences is given in *Leviathan*, chap. ix.

CHAPTER IV

EXPERIENCE THE BASIS OF KNOWLEDGE

We have seen in the foregoing chapter that for Hobbes, as much as for Bacon, philosophy and science are essentially one. In the usage of both thinkers the terms themselves are virtually interchangeable, the groundwork of knowledge being distinguished from the total edifice simply as primary philosophy or as the most fundamental portion of science. But Hobbes has a profounder conception than Bacon of the fundamental inquiry, and there appears in his work the formulation of a distinctively philosophic problem, although it remained for later thinkers to treat it with any degree of fulness. Underlying his hypothesis that all phenomena are forms of motion, and his consistent application of this hypothesis to phenomena of the most different kinds, there is contained in Hobbes's philosophy an initial and quite indispensable inquiry concerning the ultimate constitution of experience. This forms the basis of his whole system, and imparts to it that character of depth which combines with its scope to give it the nature both of philosophy and science.[1]

Scientific or systematic knowledge, we found, is defined by Hobbes as the knowledge of the conditions and con-

[1] *Cf.* Croom Robertson's *Hobbes*, pp. 77-81.

nexions of the phenomena which constitute our experience. Experience is distinguished from science only as being the original from which science is derivative, or the material which in science is wrought into system. The material of experience consists of just such phenomena or appearances ('phantasms' Hobbes calls them) as science has to exhibit in their relations to one another. The fundamental fact of experience, then—the most fundamental of all phenomena—is *appearance* itself[1]; that is, the fact of the appearing of these appearances. Accordingly, the fundamental problem of philosophy concerns the constitution and origin of appearances *as such*. Hobbes finds that the phenomena of experience are presented in the twofold character of sense and the observation or notice of sense. Without both of these knowledge would be impossible. Sense is the basis of knowledge; and the notice of it necessary to actual knowledge is rendered possible by that lingering[2] of sense which we call memory. "We take notice of sense," he says, "by sense itself—namely, by the remembrance of it as it passes away, which is the perception of one's own perception."[3] But he further finds that every such appearance or 'act of sense,' as it arises, lingers, and disappears, is a change or movement of consciousness—a mode of motion, which is conditioned (or even constituted) by a motion of action and reaction in the percipient body

[1] 'ipsum τὸ φαίνεσθαι' in the original Latin version (*De Corpore*, chap. xxv, § 1).

[2] The expression is not actually used by Hobbes, but it represents his meaning. It corresponds to his definition of imagination (which is stated to be memory otherwise considered) as 'decaying sense' (§ 7). In memory and expectation respectively must be found the roots of the inductive and deductive processes which we have seen to be the alternate phases in the developed procedure of knowledge.

[3] 'sentire se sensisse'—one might almost render by 'sense-reflexion' or 'reflexion of sense.'

or organism.[1] From this point Hobbes advances to his theory that the nature and conditioning of all the 'perpetual variety of phenomena' consists in motion. This is the first principle of his philosophy; and his whole system of doctrine is a development of this hypothesis on the lines of the method which he conceives to be the means of securing continuity of explanation and certainty of results. The detailed application of his hypothesis, or the separate investigation, in the light of it, of phenomena of different sorts or spheres, constitutes the particular sciences; an exposition of the implications of the principle itself and its relation to the common notions involved in all investigation is general philosophy; and the construction of a solid fabric of knowledge on the basis thus laid for it, as a connected interpretation of experience, would be at once and indifferently a system of philosophy and an encyclopedia of science. Such is the task Hobbes sets himself and bequeaths to his successors for its further fulfilment. But the significance of the undertaking is lost unless we realize that it is to his conception of the nature and genesis of phenomena,[2] as the universal form or mode of our experience, that he owes the generalization and enunciation, if not also the suggestion, of the principle which he proceeds to apply in explanation of all their detail and variety; and that it is the presence in his philosophy of this basal inquiry, however meagrely formulated and inadequately dealt with, that makes it a connected body

[1] § 2. Criticism of this account of experience does not belong to the purpose of the present chapter. Its fundamental truth, yet intrinsic deficiency, can be seen only through a knowledge of the whole subsequent development. *Cf.* especially pp. 205-9.—Space, it should be noted, is defined by Hobbes as the idea of externality, or of body simply as 'existing without the mind'; time is the idea of motion as successive, or of body as 'passing out of one space into another by continual succession' (chap. vii, §§ 2, 3).

[2] *I.e.* 'phantasms' or ideas.

of doctrine, and not an arbitrary transference of the principles of one special field of inquiry to other and quite different orders of fact. Hobbes's method is, as we have already learned, inadequate to the work required of it. But both the conception and the performance of his undertaking imply—what we found Bacon likewise assert—that unity and certainty of knowledge cannot possibly be attained at the expense of fundamentality.

Hobbes's philosophy, then, contains an explicit recognition of the principle that, as the foundation of all investigation of phenomena, and the common basis therefore of the several sciences, there is requisite a precedent inquiry concerning the character of phenomena *as such*—that is, considered as not only forming the material but constituting the very nature of knowledge. Hobbes is thus the direct forerunner of John Locke, the first implication of whose philosophy is that the groundwork of science must consist in an examination of the mind or understanding itself as the instrument of knowledge; that the mind's 'notice of itself,' as he puts it, is a precondition of its proper and successful 'search of other things.' But there is a difference between Locke's mode of viewing and conducting the fundamental inquiry and Hobbes's treatment of the question—one that signifies the express differentiation of philosophy from science, or at least the definite conception of a special investigation distinguishable as the philosophy or science of *mind*. Hobbes does not differentiate the investigation of phenomena as facts of consciousness or items of knowledge from that of their physical and physiological conditions. Locke on the contrary expressly sets aside, as not belonging to his purpose, the question of the dependence of mental facts on material or organic facts, and undertakes instead the detailed investigation of the ideas themselves.

His problem is, like Hobbes's initial one, that of the nature and origin of ideas. But the conception he forms of this inquiry excludes particular consideration of their physical conditions or accompaniments, and comprises only the questions—how ideas condition one another, how from them knowledge arises, and what is the consequent nature of the knowledge thus arising ?[1] Philosophy thus becomes distinctively the *problem of knowledge.*

The account Locke gives of his project in the introductory chapter of his *Essay* implies that philosophy proper, as the foundation of the sciences, is essentially a doctrine of method. What he desiderates is a means of attaining certainty of knowledge, so far as this may be attainable. For this end the prime requisite is to know the nature of knowledge, and what distinguishes certain from uncertain knowledge, or knowledge proper from mere belief or opinion. Only thus can disputes be avoided in questions that admit of being certainly answered—by attaining certainty and recognizing it as such ; and also in questions not admitting of certain answers—by recognizing their inevitable uncertainty. The means Locke proposes for securing such certainty as is attainable in the sciences, and preventing our ' demanding certainty where probability only is to be had,' consist in a preparatory examination of knowledge with a view to ascertaining its implications (or preconditions) and its accordant scope. His philosophical propædeutic to the sciences, then, is a critical inquiry into the origin, the evidences, and the limits of human knowledge, as the only means alike of setting aright the problems it is called upon to solve and of understanding the precise significance of whatever answers to them may be forthcoming.[2]

[1] *Essay concerning Human Understanding*, bk. i, chap. i, § 3.

[2] For the indifferentiation of psychology and epistemology in Locke and his immediate successors, see end of this chapter, pp. 78-81.

This conception of a critical study of knowledge, as forming the proper groundwork of the sciences, is virtually though not expressly endorsed in Berkeley's philosophy,[1] and is presented quite definitely by Hume. He, too, seeks some criterion of certainty or evidence which shall obviate endless controversies and establish a solid body of knowledge. "Principles taken upon trust, consequences lamely deduced from them, want of coherence in the parts, and of evidence in the whole"—these, he says, characterize each system of philosophy. And the imperfect condition of the sciences, of which this instability of system is the counterpart, is such that, not only is there no certainty with regard to any question, but the disputants do not even know whether they have grounds for certainty or not. The disputable nature thus manifest in metaphysical reasonings, as commonly conducted, has occasioned a mistrust in metaphysics itself. It seems that where there is so much uncertainty and futile argument all hope of reaching truth must be vain. The only remedy against aversion to metaphysical researches is, Hume holds, the understanding of their real nature and the determination, at whatever cost, to probe the question to the utmost of our ability and recognize frankly the point where our explanations become lost in obscurity. The inevitable abstruseness and difficulty of the subject, as they cannot reasonably deter us from the enterprise, so they afford no proof that it is either needless or impracticable. On the contrary, every subject of human interest or inquiry has in it some element or aspect that relates it to, and makes it dependent on, a study of fundamental principles. The chief source of uncertainty

[1] Berkeley's work contains no explicit statement of method, but it consists, as we shall see, of a deeper application of the method implied in Locke's critique of knowledge.

and obscurity attaching to philosophic questions is the want of a proper conception of the nature and scope of the inquiry. And the only means of replacing conjecture and disputation by a measure of certainty and solidity, and of bringing light out of obscurity, consist in accuracy of research and reflexion, joined with a due sense alike of the importance and the limitations of the results which such careful scrutiny and just reasoning yield.[1]

Hume's aim therefore, as he sufficiently indicates, is to transform metaphysics from a series of futile speculations into a science. This requires, first, that we understand wherein the science consists ; and secondly, that we adopt the right method of dealing with the subject. Metaphysics, or philosophy proper, signifies according to common usage that portion or aspect of science in general which concerns the fundamental principles underlying the various particular sciences. All science, whether theoretical or practical, has its basis and profounder aspects in an inquiry that is more strictly metaphysical in character. Hume finds the essentially philosophic inquiry, which is the foundation of all the other sciences, in the science of mind. Much more distinctly and fully than any of his predecessors, he points out how the various sciences depend for their stability and progress on an adequate comprehension of the nature and processes of knowledge as the instrument of all investigation. " 'Tis impossible," he says, " to tell what changes and improvements we might make in the sciences were we thoroughly acquainted with the extent and force of human understanding, and

[1] *Treatise of Human Nature*, Introduction; *Enquiry concerning Human Understanding*, sect. i. It is instructive to compare with this the substantially identical statement of Kant in the Prefaces to the *Critique of Pure Reason*.—For a suggestive statement of the correspondence in results as well as in project between Hume's work and Kant's, see T. E. Webb, *The Veil of Isis*, in the chapters on Hume and Kant.

could explain the nature of the ideas we employ and of the operations we perform in our reasonings." In undertaking to explain the principles of knowledge, "we in effect propose a complete system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security."[1]

The peculiar advantage of basing the sciences on an inquiry into the nature of human understanding Hume finds in the susceptibility of the subject to proof or certitude, which implies that it is conformable to the method of observation and experiment. Hume proposes, in fact, to make metaphysics a science and the basis of the other sciences by applying the experiential method —which is admitted to be the only adequate one for the investigation of nature—to the phenomena of mind. "As the science of man," he says, "is the only solid foundation for the other sciences, so the only solid foundation we can give to this science itself must be laid on experience and observation." Thus the conception of philosophy presented by Locke and Hume is, in the first instance, an elaboration of the principle underlying Hobbes's work, 'that mind can be investigated by the same method and under like conditions as nature.' But it is also a development of his conception that the initial problem of knowledge is an investigation of the structure or constitution of knowledge itself. Their differentiation of this from the special sciences, for which it is a precedent discipline, signifies that the most fundamental of all inquiries is one concerning the nature of knowledge as the medium or generic character of the sciences. And the conception they have of this basal inquiry signifies that it is the community of method existing between it and

[1] *Treatise* (ed. Selby-Bigge), pp. xix, xx; (ed. Green and Grose), vol. i, pp. 306, 307.

the sciences in general that enables it to form the foundation for them and to give any degree of stability to their results. In other words, philosophy and science can only be *one* in so far as the former becomes an inquiry that is truly scientific, and the latter recognizes its dependence for intelligent working and serviceable results on a criticism of the character and limits of the knowledge which it conveys. The conclusion to which Locke tends, and which Hume still more definitely asserts, is that the only certainty attainable—at least as regards actual existence—is of a kind that meets the needs of practical life but fails of full theoretic justification;[1] though, short of this, greater or less probability attaches to the conclusions reached by the experiential method. But, in any case, it is this purpose of securing to the sciences the measure of proof and the essential applicability, which come only through this community of process underlying all diversity of outlook and detailed procedure, that forms the express motive for their inquiry into the nature and significance of ideas. We have now to turn to the working out of their philosophy.

The philosophy of Locke and his immediate successors consists primarily in the theory they give—following the lines of investigation already begun in Hobbes's work—of ideas as the constituents of knowledge. In its general purport this theory is that all our ideas are obtained from, or by way of, *experience*. Locke is the authentic founder of the theory of knowledge on the basis of experience. Even more distinctly than in Bacon or in Hobbes, we have the keynote of English philosophy sounded in his initial principle: "Whence has the mind all the materials of reason and knowledge? To this I

[1] *Cf.* Chapter VIII, pp. 168, 170.

answer, in one word, From experience; in that our knowledge is founded, and from that it ultimately derives itself."[1] This expresses, in spite of variations, the general standpoint of subsequent as well as precedent thinkers. Accordingly, the development of English philosophy and the relations between its various stages depend, above all else, on differences of view as to the general character or mould, so to say, of experience. The successive phases of English philosophic thought are coincident with the stages in the evolution of the conception of experience. What, then, is Locke's precise conception? and wherein lie its merits and deficiencies?

Locke begins his account of the nature and origin of ideas by distinguishing two sources or kinds of experience —sensation and reflexion. But his statements concerning them do not involve their distinction as either coordinate sources of the materials of knowledge or diverse functions of knowledge. For the various operations of the mind which are observed in reflexion are employed about the ideas obtained from sense; and further, the mind is as passive in the reception of ideas from reflexion as from sensation.[2] Locke's designation of reflexion as 'internal sense,' and of the simple ideas both of sensation and reflexion as 'impressions,' indicates the comparative unimportance of the distinction, as thus stated, so far as his fundamental view of experience is concerned. The implication of this view is brought out in Hume's contention that impressions are the only originals of knowledge. He continues to distinguish impressions of sensation and of reflexion, but treats the latter, like ideas, as derivative. "The impressions of reflexion are only antecedent to their correspondent ideas; but pos-

[1] *Essay concerning Human Understanding*, bk. ii, chap. i, § 2.
[2] *Ibid.*, §§ 2-4, 24, 25.

terior to those of sensation, and derived from them."[1] Hume's perception that it is erroneous to distinguish sensation and reflexion in such wise as to suggest that there are two diverse sources of experience is, moreover, like some others of his differences from Locke, foreshadowed in several passages of Berkeley's early *Commonplace Book*. One passage in particular, which is entered as a memorandum in reference to his projected *Principles of Human Knowledge*, reads: "To begin . . . not with mention of sensation and reflexion, but instead of sensation to use perception or thought in general."[2] Thus, although in the opening sentences of the *Principles* Berkeley uses language precisely similar to Locke's, he had previously doubted its propriety; and throughout his exposition of the principles of knowledge the terminology is frequently in accord with Hume's rather than Locke's.

But further, Berkeley's inclination to diverge from Locke's mode of statement takes another form in his early notes—one that is afterwards extended in his later writings. We find him questioning from the first the fitness of calling the operations of the mind 'ideas'; and his subsequent use of the word 'notion,' in contradistinction to 'idea,' for the operations or activities of mind is only an elucidation of his youthful suggestions. In the second edition of the *Principles*, where the new term first appears, Berkeley nowhere identifies mental operations with the notions which are said to be the apprehension of them; but in his later philosophical work, *Siris*,[3] this identification is distinctly implied. Ideas as passively received objects are directly opposed to notions, which

[1] *Treatise*, bk. i, pt. i, sect. ii.
[2] *Works* (ed. Fraser, 1901), vol. i, p. 27.
[3] § 308. *Cf.* below, p. 67.

are the acts or operations of the mind. In one aspect of it, Berkeley's conception of notions may be looked upon as foreshadowing the Kantian theory of knowledge;[1] more especially in respect of the connexion of notions with 'relations.' This suggestion, however, Berkeley does not further develop, and it remains wholly without influence on later thinkers. It is accordingly the reverse side of the distinction—namely, the stress it lays on the passivity of ideas—that helps to bring out the view of experience which forms the fundamental presupposition of the whole Lockian development.

This view is, that the original materials of knowledge are passively received data of sense *about* or *upon* which it is engaged. The essential distinction is not between two sources of the material, but between the material and the form (or the functioning) of knowledge. Sensation thus properly signifies the source or character of the materials of knowledge, and reflexion simply awareness of the process of knowledge. Locke opposes to the 'materials' of 'sensation' the 'operations of the mind' or the 'work of the understanding'—that is, the acts or processes whereby knowledge is elaborated from the given material.[2] Experience is thus regarded as consisting ultimately of a multiplicity of unitary items of consciousness—which Locke and Berkeley call 'sensations' or 'ideas,' and Hume 'impressions'—from which all our knowledge arises. These distinct impressions or simple ideas are, Locke says,[3] the unequivocal certainties of experience; and all subsequent knowledge is derived from such fundamentally discrete constituents of our consciousness. This conception of the ultimate nature of

[1] *Cf.* A. S. Pringle-Pattison, *Scottish Philosophy* (3rd ed.), pp. 40-3.
[2] *Essay*, bk. i, chap. xii, §§ 1, 2.
[3] Bk. ii, chap. ii, § 1: "There is nothing can be plainer to a man than the clear and distinct perception he has of those simple ideas."

experience gives its character to the philosophy that is based on it, by predetermining the sort of answer that shall be given to the question of the nature and validity of the knowledge which supervenes. The development from Locke to Hume is the logical working out of this hypothesis.

There is much ambiguity in Locke's account both of the material and of the process of knowledge. He ascribes to the activity of the mind both the relation of ideas received by way of sensation and the formation of ideas which are superadded to, rather than deduced from, the original materials.[1] He speaks as though ideas were originally known in isolation from one another, each apprehended separately as a distinct item of knowledge, and yet of their constituting knowledge only through getting connected with and distinguished from each other. In the more specially epistemological portion of the *Essay*, in Book IV, Locke defines and treats knowledge as consisting, not in the isolated ideas themselves, but in apprehension of their relations, of whatever kind.[2] But the very terms of his statement imply that the ideas are already known. It is as the *objects* of mind that they form material for its manipulation. Knowledge is said to be of the relations of what are nevertheless conceived as detached existences, known separately, and forming at once the basis and the object-matter of thought. Moreover, alongside their relations to one another Locke puts their relation to real existence. Yet he is unable to make clear wherein this sort of relation differs from the other.

Now, when we inquire into the grounds of this concep-

[1] The inconsistencies in Locke's theory are such that it has even been interpreted as predominantly rationalist or conceptualist in character. See T. E. Webb, *The Intellectualism of Locke*. *Cf.* below, p. 173.

[2] Chap. i, §§ 1-7 ; *cf.* bk. ii, chap. xxxii.

tion of experience, we find that they lie in the attempt to explain experience as the outcome of the juxtaposition of individual minds with an independently existing material world. It is a consequence of that complete antithesis of mental and material existence which gave its precise form to the central problem of modern philosophy, the initial phase of this problem being to account for the origin of experience on the presupposition of the mutual independence of mind and matter.[1] Experience thus contemplated is plausibly supposed to consist fundamentally of disjunct occurrences in the experient mind. Although Locke's thought is on the whole inconsistent with this explanation of experience, and must rather be interpreted as pioneer work in the direction of surmounting it, it is unquestionably the source of his predominant conception of the nature of ideas. The supposition, too, that in such discrete ideas are to be found the primary or immediate—as distinguished from somewhat hypothetical secondary or mediate—objects of the mind in which they occur, is another outcome of the same original assumption.[2] It is the preconceived independence and disparity of the two existents that seem to make the mind's knowledge of its own states, as such, the basis of whatever else it may know. Here again Locke, while working towards the overthrow of this dualism, never wholly frees his thought from its trammels.

The ambiguities in Locke's account of ideas are no doubt largely due to the transition he is effecting from the dogmatic to the critical standpoint—from the assumption of external existence as the cause of experience to the independent interpretation of experience from the nature

[1] For an account of the antecedents and the implications of this dualism in Descartes's philosophy, see N. Smith, *Studies in the Cartesian Philosophy*, chap. i.

[2] *Cf. Scottish Philosophy*, p. 15 *ff.*

of its own content. But the statements he makes and the conclusions he draws warrant our ascribing them in part also to insufficient transcendence of the assumptions which his general methodological attitude is fitted to avoid. According to his explicit assertion, ideas are representative of extraneous things that are apprehended only through their means, while they are themselves directly apprehended objects of knowledge. "Since the mind, in all its thoughts and reasonings, hath no other immediate object but its own ideas, which it alone does or can contemplate, it is evident that our knowledge is only conversant about them."[1] "It is evident the mind knows not things immediately, but only by the intervention of the ideas it has of them. Our knowledge, therefore, is real only so far as there is a conformity between our ideas and the reality of things."[2] Such statements combine to suggest an antithesis of inner and outer—internal ideas and external things—that is not far removed from the separate entity theory of pre-critical thought.

In conjunction with this, moreover, goes Locke's mode of distinguishing primary and secondary qualities.[3] Ideas, he says, are produced in the mind by the action of things or bodies existing outside it, and the ideas in the mind correspond to qualities or powers in the bodies. Further, some of the ideas resemble the qualities that produce them; others do not. Or, to state the matter from the other side, in the one case there are qualities in the bodies which produce ideas like themselves in the mind, and so are patterns or archetypes of the ideas;

[1] *Essay*, bk. iv, chap. i, § 1.

[2] Chap. iv, § 3.

[3] The terms 'primary' and 'secondary' as denoting the two sets of qualities Locke probably adopted from Robert Boyle. The distinction itself was introduced into modern philosophy by Galilei and Descartes. *Cf.* Höffding's *History of Modern Philosophy*, vol. i, pp. 183, 227.

whereas in the other case the qualities of the bodies are powers of the former qualities (or of the bodies in virtue of these) to produce in the mind ideas unlike themselves. These are the primary and the secondary qualities respectively: the former (extension, motion, etc.) existing as qualities in the bodies, whether they are perceived or not; the latter (colour, sound, etc.) only as perceived by the mind, and attributable to bodies only as powers of the primary. According to this conception, then, ideas or mental facts are either copies of material qualities, or representative of and correspondent to them without being their similitudes. Material facts are either primary —that is, qualities essential to, or constitutive of, bodies; or secondary—that is, dependent on the different modifications of the primary, and incident to there being minds to be affected by them in certain ways.[1] Locke's own statements frequently indicate the inadequacy of this hypothesis, but he never thoroughly succeeds in surmounting it.

So far Locke's philosophy imports that the constituents of matter and mind are qualities and ideas correspondent to each other. But besides the clear and distinct ideas corresponding each for each to material qualities, we have always, when they are united together in complex ideas, the confused or obscure idea of something in which they inhere or to which they belong. This idea of a something in which qualities subsist is our idea of 'substance,' which is that of a general substrate or support of particular coexistent qualities. But, Locke proceeds, we have no knowledge as to what such a substance is, other than the qualities we ascribe to it. It is "nothing but the supposed, but unknown, support of those qualities we find existing" —a something, we know not what, besides or beyond the

[1] *Essay*, bk. ii, chap. viii, § 7 *ff.*

qualities we know.[1] Further, we are as ignorant of the nature of a supposed spiritual or mental substance, as the substrate of ideas, as of the corporeal substance or matter. In either case all we know is the characters apprehended as pertaining to them; and although in each case we assume a support of these properties, we know not what it is beyond the properties themselves. Locke is careful to add, however, that while, in default of a clear and distinct idea of them, we do not know the ultimate nature of such existents, still, from our not having this knowledge we cannot conclude against the reality of either, and are rather assured of the reality of both.[2]

The significance of this doctrine is twofold. In the first place, it partially reinforces the antithesis of mental and material substance and the representational theory of knowledge, while yet paving the way for their transcendence in its recognition that the ideas of secondary qualities, at any rate, are not copies of external facts, but are original (albeit originated) appearances in the mind, conformable to 'things' only as being the natural and necessary outcome of contact with them on the part of 'minds.' And secondly, it involves a rejection of the view that mind and mental facts are certain or categorical in any respect in which matter and material facts are only inferential and hypothetic; which, if followed up, would have meant the complete integration of mind and matter, or of experience and reality.

Locke's distinction between the passivity of mind in the reception of simple ideas and the activity of relating them, and his imperfect rejection of the separation of

[1] Bk. ii, chap. xxiii, §§ 1-4.

[2] §§ 5, 15 *ff.*—The concept of substance is at bottom equivalent to that of the limits, or rather the limiting conditions, of knowledge. *Cf.* below, Chapter VI, pp. 112, 113.

ideas and things involved in viewing them as respectively direct and indirect objects of knowledge, are both connected with the confusion, which pervades his *Essay*, between ideas as materials or contents and as functions or processes of knowledge. Regarded as the contents of knowledge, ideas are indeed the sole and the immediate objects of our apprehension, but so regarded they can neither be straightway opposed to things nor identified with processes occurring merely in the individual consciousness. And again, viewed as cognitive processes or events, they are identical with our mental acts or operations and at the same time constitute an apprehension of objective reality. Locke avoids asserting either that ideas, which are the appearances of things in or to minds, are actual characters of reality, or that they are states of consciousness or modifications of the individual mind; and he even seems to say that they are neither, but something intermediate between the mind and things. What his position truly involves is that they are equally both. But his treatment of them gives them now the character of subjective states and now of objective contents, or again of a *tertium quid*, without bringing these different aspects together or explaining the relations between them.

The same inadequate discrimination and consequent confusion accounts for Locke's defining knowledge, not as resident in ideas as such, but in the perception of their agreement or disagreement with each other or with real existence. And the implication that knowledge is of these two different sorts[1]—which Hume afterwards more clearly distinguished as concerning respectively relations of ideas and matters of fact—is part and parcel of the fundamental supposition that an idea is not, in its very nature as an

[1] *Essay*, bk. iv, chap. iv, §§ 4-8, 11, 12; *cf.* bk. ii, chap. xxxi.

idea, an apprehension of existence. Had Locke been thorough with his own principle of making the content of experience the source and vehicle of our whole consciousness of existence, including the existence of minds and ideas in contradistinction to things and qualities to which these ideas refer, the assumption of anything intermediary between consciousness and reality would have been completely discarded. Instead of ideas being viewed as subjective states, conformable to objects as external facts, the distinction of mind and things would have been seen to arise within the content of experience itself, and to signify that ideas are at once and inseparably material and process of knowledge. In default of this, Locke's theory of knowledge, while in aim and ultimate significance tending to get rid of the dogma of its representational character, in actual results serves rather to accentuate it. It is thus that he is interpreted by his follower and critic, George Berkeley.

Berkeley is clearer than Locke as to the implications of the start from ideas as the proper objects of knowledge. Accepting the principles of the 'new philosophy' (as he calls the general standpoint of Locke's theory[1]), he proceeds to develop it on less ambiguous lines. He begins by denying the validity of the distinction between the ideas of primary and secondary qualities as respectively resembling and not resembling external things. Proof is wholly wanting that any ideas are copies of things, or that an idea can be like anything but an idea. If the secondary qualities as actually apprehended are mental, so also are the primary, since the two are inseparable and interdependent. "Where the other sensible qualities are, there must these be also, to wit, in the mind and nowhere

[1] Not of Locke alone, for the same drift (as we saw) underlies Hobbes's work, and it is not without its parallel in his Continental predecessors ; but it is Locke that Berkeley has mainly in view.

else."[1] It is only through abstraction that we can suppose one sort of qualities existing independently of perception, while the others depend on their being perceived. Each quality, as perceived, is a simple idea varying with the circumstances of its perception ; and a thing, being constituted by a complex group or union of such qualities, is actualized only as idea—that is, is existent only for experience or consciousness.[2]

But if this is so, then the conception of a material substrate of sensible qualities becomes both unnecessary and unintelligible. For the sensible qualities themselves, as we actually experience them, are the only material existents we can ever know, and our experience is quite the same with or without a supposed material substance underlying them. Indeed, not only is the hypothesis in question inadequate to explain the facts of consciousness, it even renders them inexplicable, since it is at variance with the most indefeasible character of our experience — its immediate contact with the reality known [3]

Berkeley's philosophy is thus primarily directed against the supposition of independent material things as archetypes of ideas and ideas as ectypes of material things. He expresses this in his famous principle : the *esse* of things is *percipi ;* their existence consists in their being experienced. " Some truths there are," he says, " so near and obvious to the mind that a man need only open his eyes to see them. Such I take this important one to be, viz. that all the choir of heaven and furniture of the earth, in a word all those bodies which compose the mighty frame of the world, have not any subsistence without a mind ;

[1] *Principles of Human Knowledge*, § 10 (*cf.* §§ 73, 99) ; *Dialogues between Hylas and Philonous* (*Works*, vol. i), pp. 397-405.
[2] *Principles*, §§ 1, 3, etc. ; *Dialogues*, pp. 382 *ff*, 469.
[3] *Principles*, §§ 16-24 ; *Dialogues*, pp. 408-11, 442-6.

that their *being* is to be perceived or known."[1] The conception that things exist absolutely—that is, without relation to the perception of them—is self-contradictory ; and even if assumed, such existence could never be proved. Only because reality is already present in the immediately apprehended content of knowledge is it ever reached at all.

Berkeley rejects, accordingly, the entire assumption of the existence of material things as ulterior objects to which ideas correspond. In opposition to the doctrine of the representative character of ideas, he insists that the ideas or sensible qualities are themselves real. Among his earlier jottings he had written : " Ideas of sense are the real things or archetypes. Ideas of imagination, dreams, etc., are copies, images of these."[2] And in the *Principles*[3] he says : " The ideas imprinted on the senses . . . are called *real things :* and those excited in the imagination . . . are more properly termed *ideas* or *images of things*, which they copy and represent." But the involuntary and unalterable nature of the ideas of sense requires some hypothesis to account for their origin, and to explain the distinction between them and the ideas of imagination. Berkeley finds this in the conception that, although our ideas have no archetypes in a material existent, their archetypes exist 'in some other mind,' namely universal mind. The occurrence and order of ideas are independent of the finite individual mind ; but in universal or infinite mind are to be found both the originals of ideas and the

[1] *Principles of Human Knowledge*, § 6. " Consequently," he proceeds here, in anticipation of the next point in his doctrine, " so long as they are not actually perceived by me, or do not exist in my mind, or that of any other created spirit, they must either have no existence at all or else subsist in the mind of some eternal spirit; it being perfectly unintelligible, and involving all the absurdity of abstraction, to attribute to any single part of them an existence independent of a spirit."

[2] *Commonplace Book*, p. 52.

[3] § 33.

originating power which Locke erroneously ascribed to matter.[1]

The essential point of Berkeley's philosophy, then, is—and this is his own statement of its purport[2]—that by exposing the nonentity of an abstract material substrate of perceptible qualities, and substituting for it all-comprehensive mind, it serves to counteract the sceptical tendency involved in Locke's position. For if the principle or agency to which we refer the substantiality of 'things' and the production of 'ideas' is spiritual and not material, there seems no difficulty in holding that ideas are truly real, and so uniting (as is Berkeley's design[3]) the convictions of common sense and of reflexion — that 'those things we immediately perceive are the real things' and that 'the things immediately perceived are ideas, which exist only in the mind.' It is thus the hypothetical nature which any such opposition as Locke's inevitably gives to all reality beyond our ideas as immediate objects of apprehension, that gives Berkeley the motive and the warrant for rejecting the antithesis and assimilating ideas and things.

But Berkeley does not discard along with this Locke's other assumptions. He proceeds to distinguish the existence of the mind from that of ideas. Besides the things that exist only in being perceived, there is the mind that perceives them. As he puts it: "Besides all that endless variety of ideas or objects of knowledge, there is likewise something which knows or perceives them, and exercises divers operations about them. . . . This perceiving, active being is . . . not any one of my ideas, but a thing entirely distinct from them, wherein they exist, or, which is the same thing, whereby they are per-

[1] *Principles*, §§ 29-33, 90, etc.; *Dialogues*, pp. 451-8.
[2] *E.g.* in the passages just referred to.
[3] P. 484.

ceived."[1] Thus we get Berkeley's opposition of the mind as an active substance or agent to ideas as its inert objects, which is the equivalent of Locke's distinction between sensations and the operations of the mind. His undeveloped conception of 'notions,' as expressing our knowledge of mind and its acts, serves but to widen instead of spanning the cleft; for although he tends to identify the acts of mind with the notions whereby or wherein they are apprehended, and both of these again with the relations which they apprehend,[2] the ideas themselves are always opposed to the relating function or activity.[3]

The basal significance of Berkeley's doctrine, that *esse* is *percipi*, is that all reality is reality for consciousness or experience. This implies that all our knowledge of reality is contained or involved in, and must be developed solely from, ideas as the contents of our apprehension. These contents of consciousness are more or less determinate modes or items of knowledge, and as such they not only raise the whole problem of knowledge and the nature of reality, but are our sole materials for an answer. His initial insight into the inseparability of existence from the knowledge of it is, however, carried by Berkeley only so

[1] *Principles*, § 2, *cf.* 27, 139; *Dialogues*, pp. 447-50. We might interpret Berkeley's distinction as holding between the reality that consists in being perceived (the reality of object) and the reality of perceiving (the reality of subject). But, although this is the underlying truth of his statement, his language and the sequel both imply a separation between the mind and its ideas; and there is thus involved the distinction *in existence* between act and content of knowledge, which is virtually synonymous with Locke's antithesis of ideas and things.

[2] In the second edition of the *Principles*, §§ 89, 142; *Siris*, § 308. *Cf.* above, p. 55.

[3] In Berkeley's later thought there are some pregnant hints towards the correlation of sense and intellect (in spite of their distinction) through the conception of development and participation (*Siris*, §§ 264, 289, 303, etc.), which anticipate not only Kant but Hegel, as well as later English thinkers. But when we try to put the two periods of his thought together, his philosophy becomes every whit as ambiguous as Locke's.

far as to demonstrate the absurdity of a supposed independent reality which the contents of knowledge reproduce in consciousness. Ideas, he shows, are presentations in or for consciousness, but bear no evidence of being mere representations of an independently existing reality. But instead of following out his principle to its further issues, Berkeley proceeds to give to ideas another character than what belongs to them simply as the contents of knowledge, and so abandons the principle of making them the sole source of our knowledge of existence. He regards them as inactive products or effects of an agency that is disparate in its nature from themselves. His fundamental conception disposes once for all of the assumption of a reality which it is the function of knowledge simply to repeat as *known* precisely as it already *exists* : such duplication of knowledge and existence is not warrantable, and would make both inexplicable. But this gives no justification whatever for the equally untenable supposition that the *knowing* is a different form of existence from the *known*.

In accordance with this latter antithesis—the parallel of that which he has renounced—Berkeley passes forthwith from the nature of the contents of experience to their origin as presentations to the individual consciousness. And the principle that existence is inseparable from the knowledge of it gets transformed into the doctrine that the occurrence of ideas in finite minds is to be accounted for, if not by the finite minds themselves, then by the agency of infinite mind. But although the conception of a universal consciousness as the source of ideas not only provides a plausible hypothesis for explaining knowledge as an occurrence in the individual consciousness, but constitutes a far-reaching principle for the interpretation of experience through the connexion of all individual

minds and their objects in the unity of a common life, it advances not a whit, in Berkeley's hands, the original problem of the nature of ideas and their relation to reality. It leaves entirely unexplained the relation between the given presentations and the causality involved in their production. And further, it allows the connexion of ideas to remain quite contingent with reference to their content, and their whole course and order as occurrences in our experience an arbitrary conjunction of sign and significate; which, although of immense practical importance, inasmuch as it "gives us a sort of foresight which enables us to regulate our action for the benefit of life," is not in principle intrinsic to their own nature as the contents of knowledge.[1]

Thus Berkeley's conception of ideas as passively presented to consciousness, and his failure to give an account of the connexion between the ideas of the individual mind and the archetypal ideas of the universal mind, render his theory as a whole either a sheer symbolism without a basis of permanence or continuity, or else only a variation, however important and suggestive, of the doctrine of representative knowledge. For whether the examplars of ideas are supposed to be material or mental is irrelevant, so long as the relations implied in the correspondence and in their own interconnexion are conceived to be extraneous to the nature and content of the ideas themselves.

[1] *Principles*, §§ 30-2, 60-6; *cf. New Theory of Vision*, §§ 147-8; and *Theory of Vision Vindicated and Explained*, §§ 39-43. *Cf.* below, Chapter VIII, pp. 168-9. Berkeley's contention that ideas have no 'necessary connexion' is (like Hume's) essentially directed against the supposition of a mode of conjunction which is logical or rational as opposed to experiential; but (in this unlike Kant's 'manifold') his conception of merely sequent ideas undergoes no modification as he proceeds.—For further expression of the religious significance which Berkeley attaches to his doctrine, as bearing on divine immanence, see *Alciphron*, dialogue iv, §§ 11-5; *Siris*, § 252 *ff.*

Berkeley's doctrine of suggestion is valuable as an insistent appeal to elements of actual experience and as foreshadowing Hume's more thorough application of the principle of association ; but it is only through the introduction of other concepts that it acquires its constructive significance in his system. The ambiguities still lurking in Berkeley's philosophy disappear in the work of his sceptical successor.

In the philosophy of David Hume the criticism of the representational view of knowledge is both more profound and more consistent. Beginning from impressions (the equivalent of Locke's simple ideas) as the materials of knowledge, he holds throughout to the necessity of basing our conceptions wholly on the nature of these impressions. We must not presuppose a distinction between ideas and things, and regard the things as the objects of the ideas, nor again between mind and its ideas, and regard the ideas as the products of the mind. Any such conception is an interpretation of the character of our ideas as contents of experience ; and if it can be upheld and ideas taken as related at all—either in consciousness or to anything beyond it—then the distinctions and relations must be discoverable as inherent in their own nature, and not assumed in principles extrinsic to them.

This is the significance both of Hume's criterion for the validity of any conception and of his polemic against that of substance, whether material or mental, and likewise of causality, as in any way explaining the origination or the connexion of ideas. The criterion of the meaning and truth of any interpretative concept is—the impression or impressions from which it is derived. Unless we can exhibit our interpretations as arising from, and as warranted by, the immediate content of consciousness, they are mere assumptions without either verification or

definite meaning.[1] Our ideas (as he puts it in the weakened but clearer statement of the *Enquiry*) are apt to be confounded with each other, and employed without a determinate meaning; whereas impressions or sensations, either internal or external, are distinct and unambiguous. Whenever, therefore, there is a dispute concerning the precise signification or the worth of any idea that is used in explanation of our experience, the sole means of settling the question is to inquire, *From what impression is it derived?*

The same principle governs Hume's argument—which is indeed only another aspect of his one fundamental contention—that all 'philosophical' or conceptual relations are founded on and resolvable into 'natural' relations. That is to say, all connective principles must be exhibited as pertaining to, and as connatural with, the material which they are required to connect—the actual contents of our experience; all relating notions or functions supposed to have another nature than that of the ideas they relate can only be transcripts from relations involved in the functioning of the ideas themselves.[2] What account, then, does Hume give of relations, of substance, and of causality?

The only 'bond of union' or 'principle of connexion' among ideas—the only 'quality by which one idea naturally introduces another'—is, Hume finds, the principle of association. Relations are of two sorts—those which depend solely on the content of the ideas themselves (such as resemblance and proportion), and those which depend on the contingencies of factual occurrence (such as temporal and spatial position and causation). The former

[1] *Treatise of Human Nature*, bk. i, pt. i, sect. i; *Enquiry concerning Human Understanding*, sect. ii.

[2] *Treatise*, pt. i, sects. iv and v; pt. iii, sect. i; *cf. Enquiry*, sect. iii.

are discoverable either by immediate perception or by demonstration, the latter—whenever they go beyond immediate perception—only through the working of the natural connective tendencies of our ideas. Of the one, only the quantitative and numerical relations which are the basis of the exact sciences, and of the other only causal relations, go beyond the immediate evidence of our senses and memory. All relations, unless they are either intuitively or demonstratively certain, are ascertainable only by way of associative suggestion.

In accordance with the detailed discussion of this topic in the *Treatise*, we get the brief statement in the *Enquiry* of the distinction between 'relations of ideas' and 'matters of fact.' All our knowledge is concerned with one or the other of these. The former, subject only to the law of contradiction, are discoverable by thought without any reference to actual existence, and have the complete evidence of demonstration; the latter can be ascertained only from experience and have no such certainty.[1] Further, all inference concerning matter of fact is founded on the relation of cause and effect. The nature of such inference depends, accordingly, on the nature of the idea of causation or necessary connexion.

The causal relation is, Hume holds, discoverable in

[1] In the light of his whole doctrine Hume's distinction of relations of ideas from relations of fact (except as signifying degrees of abstractness and concreteness) appears almost as a provisional adoption or an uncritical survival of accepted modes of expression. It is discredited by his reduction, in general, of intellectual to experiential connexions, as well as by his own treatment of space and time. All knowledge, or knowledge *as such* (one may say by way of general criticism of the distinction) consists of relations of ideas, and again all relations of ideas express existence in some aspect or another. *Cf.* pp. 39 *ff*, 156. With Hume's compare Leibniz's distinction between 'truths of reasoning' and 'truths of fact' (see *Monadology*, ed. Latta, pp. 57 *ff*, 235 *ff*). Both are sound in motive, *viz.* transcendence of an abstract rationalism, though neither is carried to completion. They are united, and partially rectified, in Kant's theory of knowledge.

experience only as a sequence of quite distinct and separate occurrences, which disclose no nexus between them, but by their constant conjunction in our consciousness lead us to expect the one on the occurrence of the other. Thus, for example, the only sort of connexion we can detect between fire and heat is, that our experience of their conjunction has become so customary that on the appearance of one of them there immediately occurs a transition of the mind to the other, in anticipation of its appearing also. The only ' necessity ' discernible in their connexion lies in the habitual, and therefore forceful or persuasive character of this transition. Our feeling of the force of a customary transition—which feeling is identical with our belief in the invariability of the sequence—is accordingly the impression from which the idea of causation is derived.[1] Hence it follows that all inference about relations of fact or existence—all inference from the existence of one thing to that of another—is determined, not by reason, but by custom.

In respect of the idea of substance Hume's position is likewise consequent upon his conception that events are ' entirely loose and separate.' A substance is nothing but a collection of particular qualities. The only basis in experience for the notion of substantiality is our natural propensity to attribute to things a certain permanence and independence, which we nevertheless cannot prove to belong to them. As regards material substance Hume is accordingly at one with Berkeley. " Since nothing," he says, " is ever present to our mind but perceptions, and since all ideas are derived from something antecedently present to the mind ; it follows, that it is impossible for us so much as to conceive or form an idea of anything specifically different from ideas and impressions.

[1] *Treatise,* pt. iii, sects. ii-vi and xiv ; *Enquiry,* sects. iv, v, and vii.

Let us fix our attention out of ourselves as much as possible ; let us chase our imagination to the heavens, or to the utmost limits of the universe : we never really advance a step beyond ourselves, nor can conceive any kind of existence but those perceptions which have appeared in that narrow compass."[1]

But mental or spiritual substance is in precisely the same case. If the actual contents of experience are particular impressions and ideas, then these remain the only objects of our knowledge. " Since all our perceptions are different from each other, they are also distinct and separable, and may be considered as separately existent, and may exist separately, and have no need of anything else to support their existence."[2] No permanent entity underlying the changes of consciousness is revealed to introspection. " When I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception."[3] What we call the mind or self is, then, " nothing but a bundle or collection of different perceptions."

Thus Hume's philosophy is a sustained protest against conceptions and interpretations that cannot be shown to be justified by an appeal to experience. Experience is the sole basis of knowledge, and unless we can discover in our experience a rational warrant for our explanatory principles, we must abandon them and all assumption of their evidence and tenability. If, on the contrary, we find no such warrant, but only an incomprehensible tendency of our nature to rely on custom and feeling, which gives our opinions the character of practical belief rather

[1] *Treatise*, pt. ii, sect. vi. [2] Pt. iv, sect. v. [3] Sect. vi.

than of certain and demonstrable knowledge, then we must admit that these convictions, however natural and irresistible, are not capable of proof and express no rational insight.

But while Hume thus demands an immanent connexion of ideas, he is unable to supply one on account of his initial view of the contents of consciousness. Assuming from the outset, like Locke and Berkeley, that ideas are intrinsically disconnected, he proclaims them incapable of any intelligible relation. His own 'uniting principle'—the association induced by the repeated occurrence of a sequence of particular impressions—is, as he himself maintains, external to the ideas themselves, and thus affords no adequate nexus between them.[1] He does not profess that such associative connexion anywise explains the course of occurrences in consciousness, and he ascribes to it only an unintelligible working in the shape of a transition that is the outcome of habit. This is for Hume the supreme contradiction and incomprehensibility of our experience. "All perceptions are distinct. . . . All our distinct perceptions are distinct existences." "The mind never perceives any real connexion among distinct existences."[2] On the presumption that knowledge is to be possible at all, these two propositions—which are the basal principles (positive and negative respectively) of his philosophy—are, he recognizes, inconsistent with each other. Our experience, therefore, yields nothing but the distinct perceptions themselves : these, by their conjunct

[1] It has been abundantly shown by recent writers that association is inexplicable on the basis of discrete particulars—that is, without an element of continuity or inward connexion (see, *e.g.*, Bradley's *Principles of Logic*, bk. ii, pt. ii, chap. i). This Hume saw, and could find no remedy.

[2] *Treatise* (ed. Selby-Bigge), pp. 634, 636; (ed. Green and Grose), i, 558, 559.

occurrence, suggest one another and give the semblance of knowledge,[1] but they are and remain 'particular perceptions' without subject or object or other certified existence than themselves.

Hume's philosophy, therefore, begins and ends in a view of the content of experience that makes it inherently incapable of answering the problems of knowledge and existence. In so far as his insistence on the separateness of ideas implies that abstract reasoning, divorced from sense and feeling, can establish no connexions between them, it is invaluable. But it proves impotent when taken as an expression of the actual nature of the experiential basis of knowledge. Hume's error is not in reducing conceptual to experiential relations, and rejecting all explanations that are not derived from this source, but in misconceiving the nature of experience. As we shall see in the sequel, even although ideas or conscious processes present discontinuity as regards their definite contents, they are continuous in respect of their relation to immediate feeling and in their functional character as factors in the development of concrete experience.[2] It is to this aspect of their nature that Hume's principles fail to do justice. Not even the doctrine which constitutes the main contention of his philosophy—the "hypothesis that all our reasonings concerning causes and effects are derived from nothing but custom, and that belief is more properly an act of the sensitive than of the cogitative part of our natures"[3]—is itself at fault; but rather his preconception as to what sentience is, and what the functioning of custom involves. Only through rejecting his initial conception of the content of consciousness is there any

[1] Or what serves as a practical substitute for knowledge.
[2] *Cf.* pp. 143 *ff*, 178 *ff*.
[3] *Treatise*, bk. i, pt. iv, sect. v.

hope of achieving more satisfactory results.[1] How this has been attempted in the further stages of the development of English philosophy it is the task of future chapters to show.

The doctrines of Locke, Berkeley, and Hume are, then, a continuous development in accordance with the principle that the basis or ultimate character of all knowledge is experience. But their mode of conceiving the nature or the constitution of experience actually signifies the absence from their philosophy of an unfettered employment of the experiential method. Although their philosophy, both in its impulse and in its effect, is a progressive effort to get rid of the idea of explaining experience from what exists outside it, the view they take of the fundamental constitution of experience is nevertheless residual from such explanations. When knowledge is taken as originating from the interaction of individual minds and a material world which exists independently of them, the results of the contact on the experient consciousness are naturally taken as isolated facts apprehended irrelatively to one another, and as forming both the source and the primary object-matter of knowledge. And when the question of the ultimate origin of ideas is abstracted from or dismissed as irrelevant, without their nature being reconsidered *de novo*, the supposition of them as discrete objects of consciousness is left as a preconception controlling the inquiry from the outset. This view of ideas remains the controlling principle of the whole development. Hume's 'impressions,' however he may guard them against any assumption as to their origin, are essentially abstractions from the concrete content of experi-

[1] Any relevant 'answer' to Hume must accordingly be grounded on a theory of knowledge for which isolated data are essentially abstractions. *Cf.* W. James, *Principles of Psychology*, vol. i, pp. 245, 487 *ff.*

ence. They are abstracted features of consciousness, regarded as separate existences which are apprehended in their isolation and have no intrinsic relations either to one another or to anything else.

Thus, even while refusing to alloy his examination of the nature and validity of ideas with presuppositions as to existents that originate them, Hume interprets them after a fashion which only such assumptions could suggest or seem to justify. His impressions and ideas, though ostensibly not more subjective than objective, become virtually transient states of an individual consciousness with every feature of permanence and significance eliminated. Both the subject and the object are annihilated; yet ideas are treated as though the distinction between them were already taken and the problem of knowledge were how to pass from the one to the other. Consequently, Hume is precluded by the very thoroughness of his own arguments, working on the material of experience as he conceives it, from putting anything whatever in the place of the explanations he has discarded. He leaves us with the discrete ideas without any known or knowable reality to which they are in any way related. Instead of the content of experience being shown to be at once subjective and objective—as his fundamental starting-point and principles of procedure should involve—it is bereft of the character of knowledge altogether.

What now, in conclusion, is the precise methodological significance of this course of philosophic development? Both Locke and Hume recognize that the detailed investigation of the physical and physiological conditions under which ideas occur in consciousness does not belong to the distinctive problem of mental science, in so far as this can at all be regarded as constituting the theory of knowledge. As we have seen, their inquiry concerns the ideas them-

selves—the resolution of their complexity and variety into simple constitutive elements or factors, the discovery of their laws of interconnexion, and the examination of their scope and evidences as vehicles of knowledge. But they do not differentiate two modes of viewing ideas, one of which has to do with their origin and development as processes occurring within the limits of a particular course of consciousness or individual mind, while the other deals with their character and constitution as the source and content of knowledge generally. All through the philosophy of Locke, Berkeley, and Hume there runs a confusion between these two inquiries—the psychological and the epistemological—or, at all events, an incomplete understanding of what is involved in *not* distinguishing them. The distinction between the two disciplines need not imply that it is possible to consider ideas apart from their function of conveying knowledge, and then as a different or further account of them to consider their referential character. As we shall see presently, the attempt to separate the subjective existence from the objective content of ideas is futile, because knowledge never exists without an objective as well as a subjective aspect, and its reference (which is likewise both subjective and objective) is an inalienable feature of its nature as an occurrence in consciousness. But it does imply, that the problem of the nature and content of knowledge must precede that of its conditioning or origin, must determine the significance and limitations of the subsidiary or derivative question, and must not be allowed to be prejudiced by assumptions that are incidental only to this and not to the fundamental inquiry itself.[1]

And it is just this indiscrimination, and therefore inadequate relation, of the two ways of regarding ideas—as

[1] *Cf.* pp. 102, 139 *ff*, 187.

processes occurring in an individual consciousness and as contents of knowledge—that ultimately occasions the view of the nature and validity of knowledge presented in the Lockian development. For the influence of presuppositions which are a legacy from discussions about the origin of ideas, undertaken without prior investigation of their precise content, leads to the gradual obliteration from them of all referential character and ultimately to denial of their validity altogether, or at least of any adequate justification for the practical assumption of it. Much of the work of Locke and his followers consists in showing the implications of the epistemological as distinguished from the psychological consideration of the contents of consciousness ; but their dominant view of ideas and the conclusions to which it leads them are due to the failure to avoid preconceptions that come from considerations of origin rather than content. More especially, in spite of the very distinct progress towards an untrammelled inquiry into the content of experience, as the theory of knowledge proceeds from Locke through Berkeley to Hume, there remains the same conception that ideas are by nature irrelative and mutually independent existences. And this assumption, with its consequent outcome, is (we have seen) bequeathed to the critical philosophy by hypotheses as to the genesis of ideas in individual minds standing over against the things they are to know. But the result shows that this whole manner of conceiving the nature of ideas and the import of knowledge involves an insufficient comprehension both of the constitution of experience and of the significance of the experiential method. In consequence of it, the fundamental thesis laid down by Locke and developed by his successors, that *all knowledge is from experience*, is deprived of its full meaning, and thus prevented from

achieving the results that accrue from a more adequate procedure. Instead of interpreting experience in the widest sense, they narrow it down so that its contents become inexplicable occurrences which are at once our only source of knowledge and a standing contradiction of what it purports to comprise and convey. Hence follows, as we shall see, the supposition that the inevitable limitation of knowledge to experience implies a curtailment of its scope and is disparaging to its validity. A less abstract method and a correspondingly wider view of experience are required in order to repair the opening breach between knowledge and practice and between experience and reality. How this is to be accomplished will become evident as we proceed. The way to the adoption of a more concrete standpoint lies through the philosophy of Reid and Hamilton.

CHAPTER V

THE IMPLICATIONS OF EXPERIENCE

English philosophy enters on a further stage of its evolution in the opposition offered to the principles of the Lockian development by Thomas Reid and his followers in what has come to be known as the Scottish school.[1] Reid does not regard his method as differing fundamentally from that of his predecessors. He considers his philosophy a truer application of the experiential method inaugurated by Bacon and characteristic of English thought from the outset. This method, he says, "is the only one by which any real discovery in philosophy can be made."[2] So far as regards the fundamental principles of their procedure his predecessors have been right. "They have put us in the right road—that of experience and accurate reflexion."[3] But he contends that their procedure is warped by presuppositions about ideas and their place in the economy of knowledge, which disguise the nature of our experience and prevent its being taken in the character it actually proclaims itself to have. The source of error in the preceding system lies, he holds, in

[1] The founder of the Scottish school was Francis Hutcheson—in this respect, at least, that he formulated its characteristic method, namely the appeal to 'common sense,' *i.e.*, such principles of experience as seem to have universal acceptance, and to express the very nature of the rational mind. But Reid gave this appeal its metaphysical or epistemological as distinguished from its moral and æsthetic application.

[2] *Works* (ed. Hamilton), vol. i, p. 97. [3] P. 101.

these ' theories ' or preconceptions which are unwarrantably foisted upon experience, and so preclude an adequate interpretation of the facts. The position maintained by Reid was upheld chiefly by Dugald Stewart, and further developed by Sir William Hamilton.

The Scottish philosophy is in its origin a recoil against the conclusions from Locke's principles which are presented in the doctrines of Hume.[1] The general result of Hume's philosophy may perhaps be expressed most simply by saying that it is the identification of *idea* and *existence*. From this feature in his teaching, at all events, Reid's criticism takes its rise. Ideas are objects (the Humian philosophy maintains), but there is no proof that they are ideas *of* objects in the sense of implying an apprehension of existences beyond themselves. The existence of anything and the idea of it are one and the same. As Hume puts it : " The idea of existence is the very same with the idea of what we conceive to be existent. To reflect on anything simply, and to reflect on it as existent, are nothing different from each other. That idea, when conjoined with the idea of any object, makes no addition to it."[2] In a word, the idea of the existence of an object is the same as the idea of the object. It follows, if they are ideas alone that are the objects of knowledge, that the only existence we know is the existence of ideas.

The inadequacy of this as an account of our experience Reid never doubts. He sets himself accordingly to examine ' the principles upon which this system is built.' And he finds that it ' leans with its whole weight upon a hypothesis ' for which there is no warrant—the hypothesis that the mind's own ideas are the only immediate

[1] Reid himself tells us (pp. 95, 283) that he had been an adherent of the philosophy of Locke and Berkeley, until the publication of Hume's *Treatise* showed him the consequences to which it inevitably led.

[2] *Treatise*, bk. i, pt. ii, sect. vi.

objects of knowledge. This root-assumption Reid designates the 'theory of ideas.' He sees clearly that the outcome of the Lockian development is already predetermined in the presuppositions from which it begins. The reasoning he acknowledges to be quite 'just'; the conclusions follow inevitably from the premisses. "We must," then, "either admit the conclusion or call in question the premisses."[1] But the conclusion is one which Reid finds it quite impossible to accept. That ideas are 'the sole existences in the universe' is too flagrantly in contradiction with common sense to be aught but a self-refutation of the philosophy in which the conception occurs. He directs his attack, therefore, against the principles on which it is based.

In opposition to the fundamental assumption of the Lockian development, Reid urges that the object of knowledge is always other than the idea in which it is known. In perception, for example, "the object perceived is one thing, and the perception of that object another."[2] The object is not a percept or idea, but a quality or a fact. Similarly, in memory and imagination the object is not the memorial or the constructive image, but a fact remembered or imagined. Even when the object is itself an idea, it is not identical with the idea that is the vehicle of the knowledge of it. And yet any object of consciousness is immediately and not only mediately known. "Every object of knowledge is an immediate object."[3] In thus insisting that every object is as immediate as any other, Reid keeps more steadily to the divergence of his principles from any doctrine of representative knowledge and the issues which such a doctrine entails, than does Hamilton. One of the latter's main criticisms of Reid is on the score that he fails to distinguish

[1] *Works*, p. 109. [2] P. 292; *cf.* 106. [3] P. 427.

between immediate and mediate knowledge. But to say (as Hamilton does[1]) that in memory, for instance, the immediate object of knowledge is the memory-image, and that in perception what is directly known is only that portion of the material world which is in immediate contact with the sense-organs, all else being known inferentially from this, is to eliminate almost all that is of value in Reid's polemic. Hamilton's criticism only succeeds in showing that ideas, viewed as the vehicles of knowledge, may themselves be objects of knowledge—what neither Reid nor any other thinker denies. Not only does Reid contend that the results of the previous development are due to the assumption that the direct object of knowledge is always an idea, and that they can be met only by vindicating an immediate knowledge of reality distinguishable from ideas. He is convinced that the only means of avoiding the theory of representative perception is to dispute altogether the conception that the vehicle of knowledge is ever identical with the object of knowledge.

Accordingly, Reid's task is to provide an account of knowledge on the basis of the distinction of the existence of any fact or quality whatsoever from the idea or apprehension of it. In the first place, he proceeds to renew and enforce the antithesis of ideas and things, or sensations and qualities. While he rehabilitates the distinction between primary and secondary qualities, his doctrine differs from the mode of statement which Locke countenances, primarily in his insistence (following Berkeley) that there is no warrant for holding that any mental fact copies or reproduces a material fact. Mental states and material qualities, he says, ' are not of kin to ' each other, ' nor resemble ' each other ' in any feature.' The sensa-

[1] *Dissertations* (Reid's *Works*, vol. ii), pp. 810, 813-4; *Lectures on Metaphysics*, vol. i, pp. 218-9; ii, 153-4.

tions of the primary qualities, no less than those of the secondary, are utterly different from the qualities themselves : they belong to totally diverse realms, between which no resemblance is possible. " They are as unlike . . . as pain is to the point of a sword . . . as unlike as the passion of anger is to those features of the countenance which attend it."[1] Instead of resembling or duplicating material qualities, our sensations are only indications to our consciousness, inspired by a ' natural principle ' expressing the very ' constitution of our nature,' that such and such qualities exist and affect us.

But while this position may be valid as against a doctrine of merely representative perception, it implies either an immediate knowledge of the material world, which is inconsistent with the alleged disparateness of matter and mind ; or that the material world is known only as a suggestion or implication of mental states. In point of fact Reid emphasizes these alternatives in his *Essays* and *Inquiry* respectively.[2] In neither case, however, does he transcend the conception of separate existence—sensations and qualities, or mental and material facts, correspondent in external fashion to each other—even while he denies that the relation between them is that of resemblance or simple repetition.

Reid's theory of ' suggestion ' is, as Hamilton clearly sees, inadequate as a substitute for the ' ideal system.' The conception that objects are suggested to the mind on occasion of the occurrence of its ideas does not sufficiently differ from the theory of representative knowledge

[1] *Works*, p. 128 ; *cf.* 131-2.

[2] Not that there is any difference of view in the two books, for the doctrine of suggestion is stated as explicitly in the later work, but insistence on the directness of our knowledge of the external world is more pronounced there than in the earlier *Inquiry*. *Cf. Inquiry into the Human Mind*, pp. 123-5, 182-6 ; *Essays on the Intellectual Powers*, pp. 258-9.

to be secure against the logic for which the latter opens the way. Yet Reid's view has a character and value of its own. He considers sensations and ideas as signs which indicate objects and have existence as well as interest for consciousness only in virtue of the meaning they convey. "In perception," he says, "there is something which may be called the sign, and something which is signified to us, or brought to our knowledge by that sign. The signs are the various sensations which are produced by the impressions made upon our organs. The things signified are the objects perceived in consequence of the sensations."[1] The sensation is not an object in its own right; it is only a symbol, which vanishes the instant it has served its purpose of indicating an object. The thing or object is what the sensation *means* for our consciousness.[2] This doctrine, as it stands in Reid's pages, is not very markedly different from representative perception, and it leans decidedly towards the uncritical assumption of the very point requiring to be elucidated. But at any rate it involves a clear distinction between the characters of occurrence and meaning of conscious states—the occurrence of the idea as an event in consciousness and the significance it has for knowledge—instead of confounding (like Locke's philosophy) occurrence in consciousness and objectivity to apprehension.

The method which Hamilton employs for surmounting both the representational theory and the theory of suggestion is to institute an elaborate argument for external existence as a 'declaration' or judgment of consciousness itself. Consciousness in its character of immediate experience, and not any mediate function like suggestion or

[1] *Essays*, p. 332.

[2] Pp. 310-2, 315, 320.—Reid's doctrine of suggestion or signification may be compared with that of Berkeley (see references given above, p. 69) and Mill (p. 100).

inference, must testify to the reality of such existence as constituting the veritable object of our knowledge. We find accordingly that Hamilton's appeal is to the 'deliverances' of our consciousness and his argument directed towards establishing their validity. He distinguishes between the character of consciousness as fact and as truth, and says that while consciousness in its factual aspect is indubitable, as an attestation of existence beyond itself it requires at least indirect vindication.[1] But the very need of proof contradicts the conception that external existence, as Hamilton conceives it, can ever be matter of immediate knowledge. His argument involves —and this is a point he emphasizes as against Reid and Stewart[2]—that our assurance of existence beyond the occurrence of our mental states is less direct and therefore less certain than that of the conscious states themselves. This is precisely what Reid would not admit, and its denial is the stronghold of his position against the 'ideal theory.'

Wherein, then, does the view of experience implied in this phase of the English philosophic development constitute any advance on that which preceded it? Even if not competent to supplant the previous doctrines, what element of correction or of reinterpretation does it afford? The answer is given not so much in the mere contention that objects or known existents may be other than ideas—this, taken by itself, is like putting the problem for its solution; but rather in the fundamental principle of Reid's philosophy, that ideas, as such, are known—are themselves objects of knowledge—only in contradistinction to existence beyond themselves. The real signifi-

[1] *Lects. on Metaphysics*, vol. i, 271 *ff.*; *Dissertations*, pp. 743-6; *Discussions*, pp. 86, 90. *Cf.* below, pp. 93-4, for a fuller statement.

[2] *E.g.*, in *Philosophical Essays* (*Works*, ed. Hamilton, vol. v), pp. 57-8, where the statement is made that internal or mental existence is no more certain and immediate than material or external.

cance of his and his successors' divergence from the principles of the preceding development appears in the underlying implication of their whole contention, namely, that the basal fact of consciousness is not passive apprehension, but active assertion or *judgment*.[1] In opposition to the Lockian theory of knowledge Reid maintains that ideas are not primarily apprehended as unitary existences in consciousness, but are abstractions from the judgments which are the ultimate mental facts. The objects of knowledge are not ideas which are isolated occurrences prior to it, but are existences the ideas of which, in distinction from the existences themselves, are only subsequently apprehended.[2] The primary or root-judgment is the judgment that such objects exist;[3] and this it is that guarantees the objective reference of conscious states What this conception involves is that ideas, in their character of mental states or processes, so far from being the sole objects of knowledge, are known only as the vehicles of a knowledge of existence other than themselves. In other words, the idea as psychical event is only one element or aspect of apprehension, the other being always a reference to something existing beyond it ; and only by an abstraction can an idea be severed from its context and made an object on its own account.[4]

[1] *Cf.* Pringle-Pattison's *Scottish Philosophy*, pp. 78-9, 102-6.—*Cf.* also L. T. Hobhouse's characterization of apprehension as assertion (*Theory of Knowledge*, pt. i, chap. i). When an idea is interpreted as a judgment, it is impossible to regard it as a passive content—an object and not an act of mind.

[2] *Works*, pp. 106-7, 209.

[3] "The primary act of consciousness is an existential judgment" (Hamilton, *Dissertations*, p. 934).

[4] Every idea, or item of knowledge, is at once process and content of consciousness. But the distinction of these aspects is necessary. As process, any determinate mode of experience is an act or function of apprehension ; as content apprehended, it is a feature of reality pointing towards (or referring to) other such features, and therefore signifying the existence of reality beyond itself. *Cf.* pp. 62, 189, 205.

Thus the main truth contained in Reid's doctrine is that we do not begin from a knowledge of our own conscious states as subjective occurrences, and then proceed to refer them to objects, or to infer the existence of objects to account for their occurrence. Knowledge is from the outset a knowledge of objective existence. In place of being an apprehension of our ideas merely as transitory states of consciousness—which leads inevitably to the consequence that it fails to reach any ulterior objects and terminates in the subjective states themselves—it consists in conscious states which convey or constitute an apprehension of existence, and can themselves be apprehended only as yielding such knowledge. This principle is carried a step further in the statement, which Hamilton makes more definitely than Reid, that subject and object are known only in distinction from and correlation to each other.[1] For this should imply that the subjective and the objective express a distinction within the content of knowledge, and that knowledge therefore presents equally and indefeasibly both characters.

But neither Reid nor Hamilton gets rid of the supposition that subject and object are prior to knowledge and contribute jointly to its occurrence. They regard the existential import of knowledge—its subjective and objective reference—as implying that it presupposes mind and matter existing independently of it and of each other, and that it is to be referred to them jointly for its origin. Sensations or ideas as occurrences in consciousness involve the pre-existence of material things originating their occurrence; and the mind supplies intuitive principles which (albeit in the very act of the occurrence) transform the

[1] *Dissertations*, pp. 747, 933.

subjective ideas into objective references.[1] That qualities imply a permanent substance, that changing thoughts and feelings are states of an identical self, that every event must have a cause—these, for example, are conceptions which, on this view, are not simply interpretations of experience or instruments of its interpretation, but axiomatic or self-evident truths ' immediately inspired by our constitution '— ' principles of our nature ' that have an origin and authority independent of the factual detail to which they are applied.[2]

Thus, although Reid and Hamilton claim for experience an essentially objective (along with its recognized subjective) character, they reinstate the assumption which it had been the outcome of the previous development to renounce—the conception that experience is the product of two independent existences in juxtaposition with each other. Experience, in their view, is compounded of two factors or elements from different sources and with different natures. The term ' experience ' is used more expressly for the factor contributed by the object ; while the ' principles of reason ' or the fundamental judgments of existence, relation, and so forth, form the contribution of the subject. Experience is thus still conceived in an abstract way. Its objectivity is due to the impregnation of its data by an element that comes from another source than the data themselves. Instead of being shown to evolve from itself every principle that is or can be used to interpret it, the experiential basis of knowledge is regarded as depending for its significance on features that are extraneous to its own proper content, and knowledge

[1] Hamilton's distinction between the substance and the attributes of matter and mind (see below, p. 116) exaggerates rather than modifies this conception.

[2] Reid, *Works*, p. 434 *ff* ; Hamilton, *Lects. on Metaphysics*, ii, 347 *ff*.

therefore as originating only in virtue of what is superadded to experience rather than from what experience itself is or contains.[1]

Reid does not, as we saw, consider the method or the basis of his philosophy to differ fundamentally from those of his predecessors. Its method is observational; its basis is experience. Nevertheless this phase of doctrine involves a certain modification in the conception of philosophic method, even if its failure to rid itself of uncriticized assumptions implies a failure to reach the full import of the method which it helps to initiate. The proof that experience has a genuine existential reference lies in the truth that ideas, regarded as mere occurrences in consciousness which may or may not have ulterior significance or validity, are an abstraction from the actual nature of our experience. Not ideas, viewed as inert objects of consciousness with no inherent referential character, but judgments of existence or acts of existential reference—functions and not simply objects of knowledge—are the concrete material of consciousness. Thus, while the desiderated correction of the deficiencies in the previous account of knowledge is sought in a sounder hypothesis as to the nature of experience, there is implied in this a change of procedure signifying that experience has to be regarded in another way, or with a different view of the problem concerned. Reid virtually shows that the failure of Locke and his successors to establish the objectivity of knowledge is due to their adopting an inadequate viewpoint for the investigation of experience. In so far as his

[1] This is essentially the same form of doctrine as is involved in the principle which Kant likewise opposes to the philosophy of Locke and Hume: "Although all our knowledge begins *with* experience, it by no means follows that it all originates *from* experience" (*Critique of Pure Reason*, Introd., § 1). But Kant's more thorough inquiry opens up better the way of advance.—For the relations between Reid's and Kant's doctrines, *cf.* Pringle-Pattison's *Scottish Philosophy*, esp. lect. iv.

own view implies that the objectivity of knowledge can be vindicated otherwise than by means of a more thorough investigation of ideas, as the sole contents of experience, it is open to the objection that experience cannot be supplemented from any quarter that is not likewise experience; and that, accordingly, no decided advance in method and doctrine can be achieved except by seeking to take experience and its contents in the widest way and at their deepest level. But none the less the underlying implication of his philosophy is, that it is by taking a more fundamental point of view in interpreting experience that we get the required proof of its objectivity. This methodological significance of Reid's opposition to the principles of his predecessors is brought out more fully in Hamilton's treatment of the subject.

Hamilton asserts explicitly that there are two diverse methods of investigating experience.[1] According to his manner of conceiving the distinction between them, the one method is observational and concerns the facts of experience, the other is critical and concerns the implicates of experience. In the failure to distinguish these two inquiries Hamilton finds the source of the inadequacy of the preceding theory of knowledge. The critical as distinguished from the purely observational inquiry concerning experience consists, he says, in ascertaining what are the veritable declarations or deliverances of our consciousness and in rearguing any attempt to discredit their trustworthiness. These ultimate truths of consciousness are the criteria for any statement as to the nature and validity of our knowledge. In these principles of consciousness, as distinguished from our ideas in their factual existence as items of experience, is found the implication of existence beyond the ideas themselves.

[1] *Lects. on Metaphysics*, ii, 193.

On Hamilton's view, then, so long as we confine our attention to the facts of experience as occurrences in consciousness there is no verification of any existence beyond them. But distinct from their factual occurrence there is their existential import, and this, although it cannot be directly vindicated, is capable of indirect vindication. The facts of consciousness are ostensibly references to existence, and although the validity of their reference is not self-evident, as their occurrence is, we are warranted in assuming its truth until it is shown to be invalid. The falsity of the apparent reference to existence could be established only by proving that it contradicts some other fundamental implication of our experience. And since no such proof is forthcoming, the presumption in favour of its truth is established and its validity therefore sufficiently vindicated.[1]

But while Hamilton thus maintains that an adequate inquiry concerning experience shows that it implies a reference of ideas to existence beyond their own factual occurrence, the result of his distinction between 'facts' and 'truths' of consciousness is that he conceives the implicates of experience as extraneous to its own proper content. The real import of the critical inquiry is lost by its being taken as signifying that the existence to which knowledge refers is an occasion or precondition of the occurrence of the facts of consciousness as the vehicles of the knowledge, while the truths or principles of consciousness are correspondently taken as preconditions of experience belonging to the structure of the mind. Hamilton thus virtually makes his conception of philosophic method turn on a complete severance *in principle* between the occurrence of mental facts and their validity or existential reference, instead of making it depend simply on the

[1] See references given above, p. 88.

epistemological distinction between inquiring concerning the existential conditions of the facts of consciousness—the conditions of their occurrence and development in an individual consciousness—and investigating their immanent content and implications as functions of knowledge.

We may take it then, that although the principle of Reid and Hamilton—that our experience has always an objective along with its subjective significance—constitutes a step towards a more adequate method of interpretation, their procedure in the effort to vindicate it is incompatible with the true meaning of a philosophy of experience. By seeking the principles of judgment not in the nature of ideas themselves, but in a supposed constitution of the mind distinct from them, Reid, though upholding rather than disputing the principle that all knowledge is based on experience, fails to appreciate in its entirety the significance of the experiential method. And while Hamilton essays to interpret our experience by exhibiting the logical implicates of the occurrences of consciousness, his distinction of fact and truth has the same effect as Reid's procedure. The implications of experience are still treated as existents by means of which it is to be explained. The conditions which the inquiry discloses are regarded as conditions of knowledge in the sense of being its originating factors, and therefore as characterizing existence prior to it. Before passing on to a further development of their method in the philosophy of J. F. Ferrier, we must notice briefly a recrudescence of the doctrines of the Lockian succession.

As the Scottish philosophy (specially so called) arises by way of reaction against the preceding development, so the philosophy of Thomas Brown and the two Mills, though in part directly descendent from the work of

Hobbes and Hartley,[1] may be considered a counter-reaction towards a standpoint akin to that of Berkeley and Hume. The philosophic doctrines of the younger Mill, which are the maturest expression of the associational philosophy, are expounded in direct opposition to Hamilton's.[2] And in this antagonism of philosophic principles, as in previous ones, we find the fundamental points of difference between the two thinkers to lie in a divergence of their ground-views of experience.

In his examination of Hamilton's philosophy, Mill combines criticism of the intuitional theory of knowledge with constructive work on associationist principles. In the first place, he impugns the conception that the declarations of consciousness require vindication : what alone is requisite is to ascertain what these declarations are.[3] Hamilton (as we saw) had distinguished between the *facts* of consciousness as evidencing their own existence and their *truth* as evidencing the existence of something else beyond themselves ; and had maintained that while it is impossible to doubt the fact of consciousness testifying, we may doubt the truth of what it testifies. Mill says the question is not as to whether the testimony of consciousness is trustworthy, but simply as to what its testimony is—not as to the truth or falsity of consciousness, but as to what the *facts* of consciousness precisely *are*. In so saying he at once relieves his philosophy from a needless and self-refuting argument and pledges

[1] David Hartley, *Observations on Man*—an attempt (subsequent to Hume, but influenced chiefly by Locke) to explain all mental development by the association of psychic elements, on the principle that complex states may have a quite different character from that of their simple constituents. Höffding compares his general mode of conception with Spinoza's (*Hist. of Modern Philos.*, i, 446-8).

[2] Indeed both historically and controversially Brown follows Reid, and the elder Mill follows Stewart, almost as directly as J. S. Mill follows Hamilton.

[3] *Examination of Hamilton's Philosophy* (3rd ed.), pp. 163-6, 172.

it to a more thorough analysis of experience. If the existential reference of ideas is to be vindicated at all, it must be found in ideas themselves or shown to be generated by their operation in experience; it is futile to seek to discover a warrant for it in principles that are extraneous to their own material and character. The only genuine meaning of an interpretation of experience is the inquiry, what experience is or contains. What experience implies—if it implies anything beyond itself—must be a feature that arises out of it, not one that is imported into it. Unless we can exhibit any alleged principle of explanation as capable of being generated from the specific items of consciousness which are its recognizable content, the principle must be rejected in favour of one that is so generable.

In his contention that consciousness requires no vindication but only interpretation, and that it is in respect of this alone that there is scope for controversy, Mill gives unquestionable expression to the most fundamental implication of the start from experience. He proceeds, however, to rehabilitate the distinction between consciousness as dubitable and as indubitable, only in another way. He identifies the indubitable aspect of consciousness not with any ever present basis of all interpretation, but with what pertains to consciousness in its most primitive or least developed form.[1] His antithesis is between 'our consciousness in its present artificial state' and 'what is originally consciousness.' It is, according to this conception, 'our primitive consciousness' as distinguished from 'our present consciousness' that is the depository of its certainties. The ultimate and primary facts of consciousness a growing experience conceals rather than reveals. Thus, while Mill controverts the supposition that ex-

[1] Pp. 177-9.

perience is to be supplemented by an element from elsewhere than its data themselves, his own doctrine involves that it consists of primary data on which our interpretations simply get superimposed.[1]

This conception implies an essentially limited view of the experiential basis of knowledge, and precludes Mill's inquiry from being a fully competent investigation of experience. Although his method is genuinely experiential, it fails to satisfy the requirements of a philosophy of experience. The mode of procedure he follows is expressly designated the 'psychological' method, and this is the only alternative he has to offer to the 'intuitional' method which he criticizes. The psychological method, as Mill uses it, consists in resolving consciousness into its constitutive elements and exhibiting knowledge as arising from the combination of these as ultimate data. He assumes that the components which are disclosed by an analysis of the concrete content of experience form the original and indisputable nature of consciousness, and that those elemental constituents are forthwith identifiable with originating conditions, whence the subsequent content of consciousness emerges. The one criterion for any alleged article of knowledge is its resolvability into such primary elements without residuum or extraneous item, and the one function for the connexion of ideas and the acquisition of knowledge is the associability of the ideas themselves. These original elements constitute, he maintains, the only genuinely intuitional factor of our consciousness; and no supposed

[1] It is one thing to say that experience requires constant reinterpretation, and that the authority of accepted interpretations is often prejudicial to the attainment of truth: it is quite another thing to say that the acquisitions which consciousness receives by means of these interpretations intrinsically hinder instead of furthering apprehension of its import.

intuition with another nature and source can be accepted, unless it cannot be exhibited as possibly generated by the association of ideas and due to their difficulty of dissociation.[1] But Mill's conception of ideas as originally disconnected elements of consciousness prevents him from providing an intelligible means of their subsequent connexion.[2] He rightly rejects any principle of explanation extraneous to ideas and seeks an immanent means of connexion in their own uniting potency. Since, however, on the theory of ideas which he accepts, the association has no basis of continuity or inherent relation to work upon, it fails to give either a tenable account of the interconnexion of ideas or a sufficient explanation of their existential reference.

The intuitive deliverance of consciousness which Reid and Hamilton are primarily occupied in upholding is the immediate apprehension, in the act of perception, of material existence. In Brown's philosophy the material world still appears as an independent reality suggested or inferred as the originating source of ideas—an external something known as regards its existence and relations, though unknown as regards its essential nature.[3] In either case there is involved the assertion of the substantial and objective reality of matter. This conception Mill discards. He admits that our *present* consciousness contains some such conviction, but contends that this is not an *original*, but an acquired factor in

[1] James Mill explains all necessary or intuitive principles as instances of the ' inseparable association ' acquired by ideas that are constantly conjoined in our experience (*Analysis of the Phenomena of the Human Mind*, vol. i, chap. iii, § 9). John Mill endorses this theory, modifying it only to the extent of expressly maintaining that any association generated by experience may subsequently be destroyed by experience (*Examination*, pp. 182-4, 328-9, etc.).

[2] *Cf.* above, p. 75.

[3] *Philosophy of the Human Mind*, lects. ix, x; *cf.* xxv, xxvii.

consciousness, consisting in "an instantaneous and irresistible suggestion and inference which has become by long repetition indistinguishable from a direct intuition." He finds the explanation of our belief in an independent material world in the fact that our experience at any instant not only consists of definite impressions or ideas actually present, but also contains a reference by way of memory and expectation to an indefinite background of associated ideas, whose manner and order of occurrence are uniform and certain. Our actual sense-presentations acquire an objective significance through pointing beyond themselves to other possible presentations; and since these possibilities are permanent as contrasted with the fleeting character of the occurrences of consciousness, and also constant in their modes of connexion, they are regarded as containing the conditions of our actual consciousness.[1] 'Matter' Mill accordingly defines as the 'permanent possibility of sensation.' But possibilities that are only such and involve no actuality cannot supply conditions for any actuality; in order to do so they must themselves be, or presuppose, some other actuality. The question *what* reality underlies actual and possible sensations remains, on Mill's theory, unanswered and unanswerable. He resolves mind into 'a series of feelings with a background of possibilities of feeling,' but declares its ultimate nature unknowable.[2]

The associational doctrine fails, accordingly, through its abstract conception of experience. Its main contention is a valid one—that knowledge can be shown to have

[1] *Exam. of Hamilton*, chap. xi, esp. pp. 227-32; *cf.* James Mill's *Analysis*, i, pp. 344-54; and Bain's *Senses and Intellect* (3rd ed.), pp. 375-84.

[2] *Cf.* below, chap. vi, p. 118. Mill's theory of matter and mind has an intimate relation to the dominantly practical motive of his philosophy: it is concerned mainly with conditions and consequences (*cf.* p. 169).

an essential unity of origin and process, and does not require any principles other than those native to the character and functioning of ideas as such. But it regards consciousness as consisting of ideas or mental states that have no intrinsic reference beyond their own transitory existence. What reference they have is to other states (actual or possible) of like nature with themselves, this reference being generated by the associability of the originally discrete elements. On this basis Mill proffers an explanation of the independent and objective character ascribed to material existence ; but despite the value of his analysis, the underlying presupposition of the fundamental subjectivity and disconnectedness of the data of consciousness makes it impossible for him to reach any adequate substitute for such a reality.

While, however, Mill's express philosophic doctrine is thus based on the presuppositions of the associational philosophy generally, the logical portion of his writings (both in the *Examination of Hamilton* and in his *System of Logic*) presents conceptions that point to a more concrete view of experience. The distinction between ' thoughts ' and ' objects of thought ' or between ' mental representations ' and ' real objects,' the insistence on judgment as the primary act of consciousness and as asserting the connexion not of ' ideas ' but of ' things '[1]— these, taken in conjunction with his rejection of an originating source of ideas, are indications of a more adequate theory of knowledge; even if they also not infrequently appear simply to fall back on the supposition of an independent material world. What they imply is a conception of experience for which subjective states of consciousness are an abstraction from the concrete unity of knowledge—one, therefore, for which experience has

[1] *Exam. of Hamilton*, pp. 419-20 ; *Logic*, bk. i, chap. v, § 1.

intrinsically an objective import.[1] But Mill does not reinterpret the one aspect of his thought in the light of the other, and the resolution of objects into mental states remains an intractable element in his philosophy. The distinguishing feature of his thought as a whole is his recognition of the futility of seeking an explanation of experience in anything outside itself. This is a link between him and Ferrier.

A new phase in the history of English philosophy is entered upon in Ferrier's doctrine. He expressly claims for it a national character, and regards it as continuing, even in its antagonism, the work of Reid and Hamilton.[2] But in the development of English philosophy as a whole it is distinctly a new departure—inasmuch, at least, as it signifies a further conception of the problem and procedure implied from the outset. The main thought in his philosophy is, that instead of allowing our interpretation of experience to be influenced by consideration of what is or is not necessary in order to account for the *origin* of knowledge, we must start from an inquiry into its *nature* or implications. Experience or knowledge cannot be accounted for by reference to anything in existence beyond itself; for any such explanation presupposes what it professes to explain. On the contrary, inquiry concerning the character of being must be approached through investigation of the character of knowledge.

The first point in Ferrier's conception of philosophic method is his assertion of the need, in our quest for truth or reasoned knowledge, for an inquiry that shall be distinguished as necessarily precedent to all other inquiries.

[1] *Cf.* C. M. Douglas's *John Stuart Mill*, chap. iii.

[2] See Appendix to 'Institutes' (*Philosophical Works*, 3rd ed., vol. i, p. 554).

The failures and antagonisms of philosophy are due, he maintains, to our asking questions and attempting to obtain answers to them without going behind these to the initial question, on the answer to which the answers to all others depend. "Every question in philosophy is the mask of another question; and all these masks and masked questions require to be removed and laid aside, until the ultimate but *truly first* question has been reached. Then, but not till then, is it possible to decipher and resolve the outside mask, and all those below it, which come before us in the first instance."[1] "We have tried to get *to the end*, without having first got *to the beginning*."[2] What Ferrier desiderates then, as the true principle of philosophic method, is that we should put first questions first; and his index to the truly first question in philosophy is that in attempting to answer any other question we are inevitably brought round to it. In order to our obtaining a significant answer to a question, the first requisite is to understand precisely what is implied in the question itself, for only then can we understand the import of any answer that is forthcoming; and this is possible only by a recurrence to the fundamental question or questions that give their character and significance to all the others. Only by such procedure are we enabled to advance, not alone to the solution of philosophic problems, but to the intelligible setting of the problems to be solved. And in philosophy the purport of problems is peculiarly significant; for it is its function to exhibit problems in their origin and relations. Such a criticism of questions no less than of answers is, Ferrier contends, an essential feature of philosophy. It has not only to ask questions, but to see how the questions arise and what, consequently, are the precise bearings of the

[1] *Institutes of Metaphysic*, Introduction, § 16. [2] § 17.

answers that are given. "It must show the exact point where every opinion and every controversy in philosophy *takes off* from the taproot or main trunk of the great tree of speculation."[1]

According to Ferrier, the fundamental question of philosophy lies in the inquiry, What is the essential character of knowledge? or, What is involved in anything's being known? He accordingly considers a critical inquiry concerning the implications of knowledge the sole key to the proper asking of philosophic questions, and the means therefore of defining the exact bearing of any controversy and understanding the real significance of particular theories. The controversy as to the mutual independence of mind and matter, for example, should be recognized as having its primary significance in the question whether mind and matter are known in isolation from each other. If we find that mind and matter are not known independently of each other—and even, in accordance with the character of knowledge, not thus knowable—then it would seem that we are not entitled to assert that they exist in independence of each other. Any discussion about the existence of mind and matter is dependent on the prior question as to their knownness or knowability. Stated generally, the problem of knowledge precedes and qualifies the problem of being: what is or exists, is ascertainable only in the character of what is known. Accordingly, before we attempt to answer (or even to ask) any further questions about existence, we must understand what is implied in anything's being known to exist. This can be understood only in answer to the question, what 'known' means or involves; or, in other words, what knowledge is.[2]

Ferrier finds the essential character of knowledge in

[1] § 32. [2] §§ 54-60; *cf.* sect. iii, prop. 9, observations 1 and 35.

its always containing two distinguishable, though inseparable, features—a subject and an object, or a knowing and a known.[1] This is the character or constitution of all knowledge as such. That it always involves both factors is the primary condition or implication of knowledge. But they are, in the first instance, elements in the act of knowledge itself, not existential conditions of its occurrence. The inquiry into the nature of knowledge discloses only what is contained in knowledge, not anything contained in existence outside it. Ferrier insists accordingly—as against the procedure of Reid and Hamilton—that the implicates of knowledge must not be taken as signifying existents that condition its origin. They are the expression of its nature, and signify primarily only the constituents without which knowledge would not have the character it has. The significance which the theory of knowledge has for the characterization of being must, therefore, be of another sort than consists in transforming its implicates into conditions accounting for its origin. What this significance is, is the next point to be determined.

Having shown the nature or fundamental principle of knowledge, Ferrier proceeds to apply it in order to show its reference to existence. It has in the first place a negative import. It implies that nothing that is known —for example, mind and matter, or self and things—can be known as independent of knowledge,[2] or again, as

[1] Sect. i, prop. 1. Further references with a fuller statement of the details of Ferrier's doctrine are given below, in Chapter VII, pp. 135-9. Here it is its methodological import that is primarily in view.

[2] The full and correct phrase would be 'known to exist, just as it is known, independently of its being known.' *Cf.* the expression used by H. Sidgwick (*Philosophy : Its Scope and Relations*, p. 43) as an exact statement of the question as to the material world 'existing as we know it independently of our knowing it—so that our knowledge of it does not affect its existence.' See below, p. 203.

independent of each other. For they are knowable only as correlative (or, in general, related) existences; and in the precise mode in which they are known they are features or aspects *within* knowledge. When we regard the objects of knowledge as independent existences, we are abstracting them from the concrete unity of knowledge, and viewing them otherwise than as they are for it. But there is a positive as well as this negative significance. Not only is it impossible that anything should be known that contradicts the primary principle of knowledge; and impossible, therefore, that things should be known either in isolation from each other or as existing quite independently of knowledge. It further follows that if existence is known as it really is—if knowledge is real, and what is known in knowledge is real existence—then what is essentially constitutive of knowledge likewise characterizes existence or reality. But this is the postulate and *raison d'être* of all knowledge; namely that knowledge, in virtue of its own proper character, is knowledge of reality. Hence we have the means of characterizing reality or *real* being. What really exists is always subject and object together—mind in correlation with matter, or self in union with and yet distinction from the things it apprehends.[1]

While, however, Ferrier thus shows that *if* knowledge, as such, is knowledge of reality, an understanding of the implications of knowledge will enable us to pass thence to a characterization of being, the condition remains a mere postulate without any basis of fact, unless we recognize that knowledge has no character other than that of being a knowledge of the reality it interprets. But Ferrier's treatment of knowledge is inconsistent with the essential unity of knowledge with the reality known.

[1] III, prop. 10.

He supposes that the material or content of knowledge is quite adventitious with respect to its form or constitution—that the nature of knowledge is independent of that of being. While existence, if it is to be known at all, must have the character required by the constitution of knowledge, the constitution of knowledge is, in Ferrier's view, indifferent to the 'things' that it knows. He insists, indeed, that one feature in whatever is known must be a mind or self; but he also insists that the other feature might be *anything*. The one indispensable requisite of knowledge is the form—mind and some material, self and some thing. But what the material is, Ferrier regards as irrelevant to the nature of knowledge. The source or medium of its apprehension is different from knowledge; it is not thought, but sense, which is an aspect of experience quite other than knowledge, and only contingently related to it as the means of affording it the content with which it deals. This gives the nature of the matter or things, as distinct from the mind or self, which knowledge involves. Sense is thus (at least potentially) variable, knowledge is invariable; or the form of knowledge is constant, while its material or sense-content is inessential to the form.[1]

But this involves that knowledge has been considered from the first in abstraction from the concreteness of experience. Ferrier's doctrine of the contingency of sense in relation to thought is the counterpart of an abstract or formal view of knowledge. This is indicated in his admission that, while sense as we know it is not an indispensable condition of knowledge, some analogous mode of apprehension is essential. Hence without some modification Ferrier's investigation and its results concern the form of knowledge not as expressing or expressed

[1] I, prop. 22.

in its material, but in contradistinction to it. The implicates which it discloses are not concrete constituents of experience, but its formal or logical conditions. Only by refusing to treat knowledge as an instrument with a nature distinct from its own application—or (what is the same thing) to separate the function or process from the content or product of knowledge—can we avoid a merely general and formal conclusion to our inquiry concerning it. And when we thus take knowledge in relation to its source or material, we find (as we shall see) that the conditions of experience are — not indeed realities existing in separation from knowledge, for all known and knowable existents are related in or to it—but either constitutive features of our concrete experience itself, or else aspects of reality that lie beyond it only in the sense of being already implied in its determinate contents and forming the very source from which they spring. In a word, all implicates of experience can only be actual or potential items of experience itself.

The main principle of Ferrier's philosophic method is, then, that the problem of knowledge is prior to and presupposed by that of being or existence. That questions about existence should be prefaced by some sort of inquiry concerning knowledge is an implication of the experiential method from its formulation by Locke, or even from Bacon's critical investigation of 'idola.' And, as we have seen, the elevation of this into a definite rule of method is the underlying significance of Hamilton's distinction between the psychological and the logical conditions or implicates of knowledge. But the conception of an examination of knowledge, as introductory or propædeutic to the work of the sciences, and the question of the relation between the occurrence and the validity of ideas, are now transformed into the doctrine

that the nature of being can be interpreted only through or by means of an interpretation of knowledge. In Ferrier's philosophy the start from experience and with a critical study of knowledge becomes an explicit approach of being from the nature of the knowledge of being. Even when in the systems of previous thinkers the problem of knowledge is taken as in any way anterior to that of existence, the inquiry is never kept wholly free from assumptions as to what is or is not requisite in existence to account for knowledge. Ferrier shows the incompetence of such procedure. When we ask what *exists*, we inevitably find ourselves trying to state in answer what we know to exist—what is *known* as existing. 'This or that exists' always signifies 'this or that is known as existing.' But Ferrier's own procedure is defective. Although avowedly experiential, his philosophy introduces into experience a distinction which it cannot properly bridge. Instead of taking knowledge in its concrete unity with the reality known, he characterizes knowledge in abstraction from its experiential basis, and passes from knowing to being only through his further contention—in itself, as we shall see presently, quite sound and valuable—that knowledge, as such, is knowledge of reality. In a subsequent chapter we shall get the required correction of Ferrier's epistemological theory through a reinstatement of the essential unity of the experiential source of knowledge.[1] But we must first consider an aspect of the development which his doctrine on the whole helps to set in its true light—that concerning the general validity of knowledge, or its competence to treat of reality.

[1] *Cf.* Chapter VII, p. 142 *ff.*

CHAPTER VI

KNOWLEDGE AS SIGNIFICANT OF REALITY

Along with the emphasis on experience as the starting-point and criterion of knowledge, which is characteristic of English philosophy, has gone a recurrent assertion of a region of reality that is beyond our ken. The one conception is indeed the counterpart of the other. The principle that only what enters into our actual experience is a valid basis for philosophic doctrine, signifies the restriction of knowledge within certain limits; the implication being that whatever lies beyond these limits is unknowable, or at least unknown. This self-limitation of knowledge, like the experiential attitude itself, is connected with the practical trend of English thought. A characteristic note of the doctrine that knowledge is confined to certain aspects or portions of reality has been the contention that the sphere which *is* accessible to knowledge comprises all that concerns the guidance of action or the conduct of life: what lies beyond is matter of speculation rather than of practical concern.[1] This is the general and practical basis of the doctrine, whatever be the particular theoretic argument advanced in support of it. But the precise theories of a known and an unknown sphere that are upheld by successive thinkers (and, connected therewith, their ideas of the relation between

[1] *E.g.*, Locke, *Essay conc. Human Understanding*, bk. i, chap. i, §§ 5, 6; bk. ii, chap. xxiii, § 12. *Cf.* below, p. 166.

theory and practice) undergo development, just as do their precise conceptions of the nature of knowledge and experience. And these are implicated with each other. The development of the conception of experience is correlative with an advance of view as to what is beyond experience, or what it is that is unknown or unknowable. In the present chapter, accordingly, we shall carry a step forward the implications of the principle that knowledge is based on experience, by considering the evolution in the conception of the relation of knowledge to reality.

We have seen that the conception of experience that mainly dominates the philosophy of Locke and his immediate successors is that of a set of discrete data, in the connexion of which knowledge arises. This is the view of experience that forms the basis of the traditional sensationist philosophy. But when we consider the working out of the hypothesis, there appears as its inevitable counterpart or consequence the conception of something unknown and unknowable as a background and offset of what is known. The pre-critical philosophy that begins from the antithesis of mental and material existence, proceeds on the supposition that the mental facts which arise from their contact are representative of the material facts which condition the appearance of the mental; and the conscious states or ideas being considered more intimately and directly known than the ulterior objects imaged by or in them, the material existents come to wear a more or less inferential and problematic aspect. This affords the premisses for a sceptical conclusion. If mental facts are the only immediate objects of consciousness, have we any assurance that there are other real objects at all? What warrant is there for positing any known existence whatever, other than the conscious states themselves?

When Locke initiates the critical investigation of experience and the nature of ideas, while at the same time the prior assumptions are not fully discarded, ideas still seem to retain a representative, and things an extraneous character. From this implication his authentic doctrine never quite frees itself. Moreover, his conception of mental and material substance as alike unknown in their ultimate nature suggests the doctrine that the mental and the material are correlative or correspondent characters exhibiting the nature of one otherwise unknown reality, which is conceived only as conditioning the knowledge these characters convey.[1]

Berkeley's philosophy is, more explicitly than Locke's, a criticism of the conception that ideas have only a representative function. He rejects *in toto* the assumption of material archetypes. But the trend of his thought is not at all towards denial or doubt of a knowledge of reality :[2] on the contrary, the key to its whole motive and sequence is contained in the removal of the possibility, which he sees this assumption involves, that all our knowledge is only appearance and never reaches the reality supposed to be known.[3] Yet while Berkeley's philosophy tends to break down the opposition between experience and reality by assimilating ideas and things, it fails, we saw, to provide any adequate account of the distinction between ideas as existing *within* and *beyond* the individual

[1] *Essay*, bk. ii, chap. xxiii, § 22 *ff.* "The simple ideas we receive from sensation and reflexion are the boundaries of our thoughts; beyond which, the mind, whatever efforts it would make, is not able to advance one jot; nor can it make any discoveries, when it would pry into the nature and hidden causes of those ideas "(§ 29). "The substance of spirit is unknown to us; and so is the substance of body equally unknown to us" (§ 30). *Cf.* iv, iii, §§ 23-9.

[2] Although knowledge is regarded, as we shall see (pp. 168-9), in a way that makes it essentially practical in character.

[3] *Principles of Human Knowledge*, §§ 86-8.

mind. And it accepts without criticism the distinction between mind and its ideas, and the conception that this involves that the ideas are the objects, not the acts of the mind.

Consequently, when Hume proceeds to apply to mental substance the same reasoning as Berkeley had applied to material, we are left with the equation, idea = object or existent, without either things or minds as anywise distinct from the ideas themselves. Hume's criticism, founding (like the doctrines of Locke and Berkeley) on 'particular perceptions' or ideas which are quite 'distinct' from one another, maintains the invalidity alike of any material 'existence distinct from the mind and perception,' and of mind conceived as 'distinct from the particular perceptions.'[1] On this view, if there exists anything else besides ideas, it is at all events unknown and unknowable. Hence Hume's position is the direct sequel of that aspect or interpretation of Locke's theory just indicated, namely, that what is really implied in the conception of a 'somewhat' beyond the actual contents of experience is that these contents are conditioned by some otherwise unknown reality. For what alone is definitely expressed in positing, beyond perceptible qualities, an unknown substrate 'wherein they do subsist and from which they do result,' is on the one hand that the known is bounded by the unknown, and on the other that in the unknown lies somehow the cause or the explanation of the known. And when the implications of the assumed irrelative character of ideas are, in Hume's hands, worked out to a logical conclusion, whatever is *without* experience is dismissed as unknowable; the 'ultimate cause' of ideas being 'perfectly inexplic-

[1] *Treatise of Human Nature*, bk. i, pt. ii, sect. vi; pt. iv, sects. ii and v.

able,' and its nature for ever indeterminable by human reason.[1]

The intuitional or common-sense philosophy of Reid and Hamilton, which follows as a reaction against the Lockian development, is, as we have seen in the preceding chapter, an attempt to establish the validity of knowledge by maintaining its intrinsically objective character in opposition to the subjectivity of the sensationist doctrines. But although Reid is emphatic in his denial that subjective ideas are known with a certainty that does not extend to objective things, and Hamilton equally so in his assertion that consciousness testifies to the reality of existence beyond itself; they uphold the objectivity of knowledge, only at the expense of reinstating the antithesis of individual mind and material world as factors in its production. The principles of relation, which are taken as securing the objectivity of knowledge, are referred to another source than the terms they combine and interpret; mental and material existence being in this way conceived as conjoint originators of knowledge. That escape is impossible on this hypothesis from the sceptical issue which their philosophy seeks to avoid, becomes apparent, however, when Hamilton proceeds to distinguish between the characters ascribed to these existents and their actual being.

Reid's doctrine of perception, taken in conjunction with his statement of the difference between primary and secondary qualities—that in the case of the former we know equally well both the quality and our perception of it, whereas we know the latter qualities only as powers in bodies occasioning the perceptions,[2] already points in

[1] *Treatise* (ed. Selby-Bigge), p. 84; (ed. Green and Grose), p. 385.
[2] *Works* (ed. Hamilton), i, 313 *ff.*

the direction of Hamilton's view.[1] For if certain qualities of matter are unknown in themselves, and known only as relative to our perception, the doubt at once emerges whether any qualities at all are known absolutely and immediately; and the question again arises as to the warrant for immediate knowledge. Hamilton maintains that the secondary qualities, so far as they are known, are solely mental or subjective facts; while the known primary qualities, or material and objective facts, are apprehended directly in so far as they are in immediate contact with the sense organs, and indirectly or inferentially in so far as they are not 'now and here' present.[2] In other words, his criterion of immediate knowledge is presence in consciousness as a mode of mind or proximity to the organism as a mode of matter. He asserts, accordingly, *both* that material existence is in general less directly and certainly known than mental existence, *and* that we have an immediate knowledge of the material world. But the two positions are mutually contradictory. To yield a consistent statement they require alike to be replaced by the conception that all knowledge, whether of mental or material facts, has both an immediate and a mediate aspect—a conception which Hamilton never reaches. In the end he is driven, by the force of his own logic, to put the two existents quite on a par; but it is only to deny a competent knowledge of either.

[1] Prof. Pringle-Pattison quotes (*Scottish Philosophy*, p. 184) an almost solitary passage from Reid in which Hamilton's relativist doctrine is quite distinctly foreshadowed. "The essence both of body and of mind is unknown to us. We know certain properties of the first and certain operations of the last, and by these only can we define or describe them" (*Works*, p. 220).

[2] *Lectures on Metaphysics*, vol. ii, lects. xxiv and xxvii; *Dissertations* (Reid's *Works*, vol. ii), B and D. (Hamilton's conception of intermediate or secundo-primary qualities does not alter his main position.) The point is further discussed by J. Grote, *Exploratio Philosophica*, pt. i, pp. 101-2, 253-4. See also below, Chapter IX, pp. 193-4, 201 *ff.*

For he holds that, whether the attributes of mind and of matter—the characters we attribute to these two realities—are known directly or through the intervention of some form of representational consciousness, in neither case have we a warrant for maintaining that the substantial or actual nature of their existence is thereby apprehended. His conclusion is : " Mind and matter, as known and knowable, are only two different series of phenomena or qualities ; mind and matter, as unknown and unknowable, are the two substances in which these two different series of phenomena or qualities are supposed to inhere. The existence of an unknown substance is only an inference we are compelled to make from the existence of known phenomena, and the distinction of two substances is only inferred from the seeming incompatibility of the two series of phenomena to coinhere in one."[1]

The outcome of this phase of doctrine is accordingly as sceptical as that which preceded it. If we accept as the data of knowledge certain definite and indisputable facts, then whether we treat these facts as so many isolated items of knowledge (as the sensationist philosophy does), or regard knowledge as requiring the supplementation of these by another order of indisputable facts (as in the intuitionist doctrine) ; in either case aught else turns out to be unknowable, or to be knowable only in respect of its existence but not of its nature. Or to vary the statement : Whether we regard matter and mind as being apprehended only in (or as) discrete characters occurring in consciousness or as existents preconditioning consciousness, on either view an impassable chasm appears between the facts as they are apprehended in knowledge and anything else beyond them. If we refuse, with

[1] *Lects. on Metaphysics*, i, 138 ; *cf. Discussions*, pp. 639-40.

Hume, to assume the disparity of the mental and the material, we get *one* unknowable reality ; if we accept it, as Hamilton does, we get *two*. But in the one case as in the other the source of the theory of unknowability is the conception that ideas themselves lack referential or connective character : they are supposed to be neither continuous with one another nor with the reality they apprehend. We can avoid this result only by recognizing that ideas are not irrelative, but thoroughly relative—relative both to one another and to what is beyond though continuous with them.

The resuscitation of the empirical standpoint in the doctrines of Brown and Mill is noteworthy, in the present reference, for the additional evidence it affords of inability to give a satisfactory account of knowledge on the same general presuppositional basis. Brown, like Hume, avoids the preconception of a distinction between mental and material or internal and external existence. But he ends with modes of mind as the only definitely known facts ; while matter is inferred as conditioning their occurrence, and although so far known as regards its existence, it is unknown in its nature. Mill upholds Berkeley's hypothesis of the sufficiency of mind, and explains matter as erroneously suggested by inseparable association of mental states. But he avers that our conscious states themselves disclose 'a final inexplicability.' Both theories, therefore, renounce the doctrine of representative knowledge—that there are material and mental facts correspondent to each other. Yet neither gets rid of the unknowable. Brown finds it more especially in matter, Mill in mind. And the grounds on which Mill posits an inscrutable reality underlying the phenomena of consciousness are precisely such as disclose the initial error from which the doctrine springs. Having

applied the associational view of knowledge in order to explain the conception of an external material world, Mill proceeds to inquire whether such an explanation is applicable likewise in the case of the other alleged reality beyond the occurrences of consciousness—the internal or mental existent. He concludes in the negative. The conception of mind as well as of matter is, he says, that of a 'something' contrasted with its manifestations or definitely known character. But the phenomena of memory and expectation—the experience of a past or a future in, and as continuous with, the present[1]—forbid us to account for the whole of our consciousness by its actual content together with a reference to an indefinite background of possible content. For these phenomena are unintelligible except on the hypothesis either that a succession of consciousnesses or 'series of feelings' can be 'aware of itself as a series,' or that the mind is something quite different from a succession of consciousnesses. Since, Mill concludes, we can comprehend neither of these alternatives, we must acknowledge this truth—that what is past or future can yet be apprehended in the present—as an inexplicable fact to which no theory is adequate.[2] Or, as he expresses his conclusion in another passage, we are compelled to acknowledge in mind a reality which is known to itself phenomenally as a series of consciousnesses, but is in its real nature unknowable.[3]

It is thus the assumption of the essential disconnexion of conscious states, or the absence from them of all inherent referential character, that leads Mill to assert the inexplicability of the actual phenomena of conscious-

[1] In the admission that the continuity is here an aspect of experience as real as the sequence, lies, were it extended to consciousness generally, the means of correcting the conclusions of Hume and Mill.

[2] *Exam. of Hamilton's Philosophy*, pp. 247-8.

[3] P. 263.

ness, and conjointly, the existence of an unknowable reality underlying them. In other words, the preponderance given to the discreteness over the continuity of mental states, which had ruled the Lockian development, is here once more carried to a consistent issue. The Berkeleian strain in Mill's thought causes the stress to fall on *mind* as the unknowable existent which is taken to be implied in experience. But in his case as in Hume's it is the implications of the continuity of experience, reacting on the presupposition of its discontinuity, that give the general result which is the self-refutation of their philosophy. And as we have found in Hamilton's theory, the counterview which asserts the external reference of consciousness, but seeks its relations in a source that transcends its terms, fails in the end to avoid the same general conclusion.

But further, Hamilton's philosophy presents an additional phase of doctrine that makes evident the final concurrence in outcome of his mode of thought and that which he opposes. This further phase follows from the other so soon as the 'incompatibility' of mental and material existence is taken as not excluding their union in a common and more ultimate source or ground. However disparate mind and matter are, they are nevertheless relative to each other, and this fact signifies the connexion as well as the distinction of the two. Hamilton maintains, accordingly, that not only are the qualities of mind and matter respectively relative to a substance which transcends these qualities, but they are known only in correlation to each other. All qualities, both of mind and of matter, are thus known only as relative to or conditioned by one another. In general, each fact known is known only as limited or conditioned by other facts known together with it. Hence knowledge is only

of the conditioned : the unconditioned is unknown and unknowable. But what is conditioned implies the unconditioned as its complement or ground—implies its *existence* (according to Hamilton), although it is *known* only as the negative of the relative and conditioned. We can know existence only as conditioned, but we cannot avoid at the same time positing unconditioned existence, albeit unknowable or known only negatively as complementary to the conditioned.[1] The essential purport of such a doctrine is—that whatever is known, is known only as relative to something else, each item of knowledge being in the end relative to all other items, and all of them alike relative to the unknown. But as Hamilton holds it the doctrine is both inconsistent in itself and at variance with the other principles of his philosophy. For, in the first place, a merely negative conception is a psychological impossibility ; it must have some positive features, however contrary they are to the conception to which it is opposed. To be conceived as existing at all, therefore, anything must be positively and not simply negatively conceived ; to be known as existing it must be positively, however meagrely, known.[2] But again, and apart from this, the principle that knowledge is only of 'the relative as variously related' is contradictory both of an abstract opposition between relations and terms, and the supposition of determinate existents as prior conditions of knowledge. For it is implied in the

[1] *Dissertations*, pp. 935, 965 ; *Discussions*, pp. 12-4.

[2] The reintroduction by Hamilton and Mansel, in the form of belief, of what is excluded from the sphere of knowledge, bears on the practical side of the question and raises the problem of the relation between theory and practice. Reference will be made to it in a subsequent chapter (p. 172). This much at least may be said here, that no position is satisfactory which simply leaves these two contrasted with each other, and that from the theoretical point of view the distinction between belief and knowledge can only refer to the less and the more definitely known.

relativity of knowledge that known existence is phenomenal to consciousness, and therefore cannot account for its origin.

With respect to the former of these points Hamilton's position gets corrected in the philosophy of Herbert Spencer. "The unconditioned," Spencer says, "must be represented as positive and not negative." Every proof of the relativity of knowledge postulates the existence of something beyond the relative; and as all existence is, as such, positive, all consciousness is a positive consciousness of existence. What is conceived or known as existing beyond knowledge cannot, therefore, be thought of as *only* negative of the knowable : if it eludes distinct consciousness, it is at the very least something more and other than the limited or conditioned; something, therefore, of which we have 'a positive though vague consciousness.' In other words, the very character of knowledge which involves that all that is definitely known is relative and conditioned, involves likewise the indefinite consciousness of that which transcends definite knowledge. For the definite is such only by virtue of arising out of the indefinite, which persists throughout the variations of definite thought : all definition implies something which is defined—something which, while still undefined, is real. Spencer concludes accordingly : "Our consciousness of the unconditioned being literally the unconditioned consciousness, or raw material of thought to which in thinking we give definite forms, it follows that an ever-present sense of real existence is the very basis of our intelligence. As we can in successive mental acts get rid of all particular conditions and replace them by others, but cannot get rid of that undifferentiated substance of consciousness which is conditioned anew in every thought; there ever

remains with us a sense of that which exists persistently and independently of conditions."[1]

But if this is so, Spencer's characteristic doctrine that the 'actuality lying behind appearances' is unknowable,[2] cannot be finally upheld. Not only have we, as he maintains, an indefinite consciousness of reality as the ground and warrant of whatever is definitely known; but reality is precisely that which our knowledge progressively defines. Spencer regards the conception that we have an indefinite consciousness of reality besides the definite consciousness which constitutes knowledge or appearances, as the only safeguard against a sceptical issue. But his own view only converts the sceptical into an agnostic attitude. For our 'indefinite consciousness of the unconditioned' does not, in his view, preclude reality from being 'for ever unknowable.' But this is self-contradictory. 'Unconditioned existence' is indeed unknowable. But this does not mean that we have to posit once for all an unknowable existent 'beyond conditioned existence' and then confine ourselves to the appearances which are inconsistently said to 'manifest' this reality. It means that existence so far forth as unconditioned—that is, not characterized by being brought into relation with already known existence—is assuredly unknown, but not therefore incapable of

[1] *First Principles*, § 26.

[2] § 22 *ff*. *Cf*. *Principles of Psychology*, vol. i, § 272: "We can think of matter only in terms of mind. We can think of mind only in terms of matter. When we have pushed our explorations of the first to the uttermost limit, we are referred to the second for a final answer; and when we have got the final answer of the second we are referred back to the first for an interpretation of it. We find the value of x in terms of y; then we find the value of y in terms of x; and so on we may continue for ever without coming nearer to a solution. The antithesis of subject and object, never to be transcended while consciousness lasts, renders impossible all knowledge of that ultimate reality in which subject and object are united." See also vol. ii, pt. vii, chaps. xv-xix.

becoming known. The distinct articulation of this principle belongs, however, to a mode of philosophy to which Spencer's statements are inadequate. For the proof that existence is intrinsically knowable lies in the truth that 'existence' is *for* knowledge just what is actually or potentially known. Unless any existent is either known or continuous with the known it cannot be anything for knowledge at all, that is, cannot exist even in thought, and hence cannot be thought as unknowable. The defect, then, of the Spencerian doctrine lies not in the relativity of knowledge but in not making the relativity thorough enough. Hamilton and Spencer propound relativism in opposition to absolutism. But their doctrine is itself absolutism in the sense of maintaining existence irrelative to knowledge. That anything exists but cannot be known, even if we add that it must be thought, involves that existence is not as such relative to knowledge—that knowledge and existence are not essentially relative to each other.

The argument against the conception of unknowable existence is, in the English development of philosophy, first formulated by Ferrier;[1] and a basis is thus laid for the overthrow of the doctrine of nescience. The true remedy against undue declarations of ignorance is, Ferrier says, to institute an independent inquiry into what the nature of knowledge (and by implication, of ignorance) really is. When we do so, we find that unknowable existence is a nonentity which is only a phantom of the reality we know. Whatever are the deficiencies of Ferrier's philosophy,[2] his position here is in essentials impregnable. What his principle involves

[1] This is the theme of the 'agnoiology' which is the link between the epistemological and the ontological portions of his theory.

[2] *Cf.* pp. 107, 137.

is that knowledge cannot be *only* phenomenal and relative, since we cannot know anything *as phenomenal* without implying what is not phenomenal, and this means that there is a non-phenomenal significance *in knowledge*.[1] And further, we cannot posit, either as determinately known or as inherently unknowable, any existent irrelative to knowledge; for we can only know what existence is by asking what it is for knowledge, and it is the differentiation of features in knowledge that is our sole basis for distinctions in reality.[2] Real existence, then, cannot be unknowable; on the contrary it is precisely what is knowable. For knowledge the only unknowable is the unintelligible or contradictory; and to suppose that real existence is unintelligible or contradictory is to belie the nature of knowledge. Further, ignorance being simply want or deficiency of knowledge, there can be no ignorance of what it is not possible to know. "There can be an ignorance only of that of which there can be a knowledge." In other words, the sphere of knowledge and that of ignorance are coincident; the knowable is also the only 'ignorable.' Reality, therefore, or any character of reality, may be either known or unknown—what we know or what we are ignorant of—but it cannot be incompatible with the nature of knowledge; and the circumstance that knowledge cannot extend to what is incompatible with its nature—that is, the self-contradictory—is not a defect of knowledge but its strength, that which makes it knowledge and therefore knowledge of reality.[3]

This conclusion has been enforced and amplified by subsequent thinkers. There is substantial agreement among recent writers that the alleged eclipse of knowledge

[1] *Institutes of Metaphysic*, sect. i, props. 14, 18, 20.
[2] Introd., § 54 *ff.* [3] Sect. ii, props. 1-3, ; iii, 1-5.

by the shadow of unknowable reality is fallacious and inconsistent. Present-day controversy concerns the precise nature and the relative extent of our knowledge rather than its general validity. The centre of interest has shifted from the question how far our knowledge is real to the question how much we really know.[1] Is not our actual knowledge of reality infinitesimal when compared with the reality that is unknown or at best apprehended only in uncertain outline as a surmise and a problem? Or to put it otherwise: Is not the definite or certified knowledge we have yet attained only taken as valuable at all because it is supplemented by vague guesses which have a practical significance but lack theoretic confirmation? And must we not find in such inchoate apprehension the *suggestion* towards more adequate knowledge, and in this in turn the *amendment* of our conjectural beliefs? Such are the questions underlying present discussions. But in order to get a clear issue we require to keep the past development of philosophy before us; for our present topics are simply the forms into which the historic problems have been thrown for us by the discussions of our predecessors.

To summarize and conclude the foregoing discussion: The conception that experience consists fundamentally of definite items of consciousness that are apprehended irrelatively to one another, and that knowledge arises by way of extrinsic connexion of these data, or fails to be knowledge if they cannot get connected, leads to the conclusion that we have no guarantee of the ultimate validity of our knowledge. And the counter conception, that the desiderated relations are supplied by principles of another

[1] This aspect of the matter was distinctly expressed by Hamilton (*Discussions*, pp. 629-30). *Cf.* Pringle-Pattison's *Scottish Philosophy*, p. 206 *ff.*

order than the data themselves, has a similar result. The source of both theories is the supposition that mind and matter exist, as they are known, independently of the knowledge of them, and that in these known existents are to be found the preconditions and the explanation of experience. But the outcome of this assumption is, that since we know matter and mind only in so far as they are characterized in knowledge, what they may be apart from knowledge we do not and cannot know; and as they are already posited as existents prior to knowledge, they seem to be unknowable in their real nature and known only in respect of certain characters which enter into knowledge. When it is recognized that the two existents are known only relatively to each other, and must have a common ground of relation, there still seems to be unknowable existence although it transcends the nature alike of matter and of mind. The only means of escape from this conclusion is the recognition that mind and matter or subjective and objective existence[1] are, as they are known, realities only *within* experience. The presupposition both of the sensationist and of the intuitionist philosophy is that subject and object exist outside experience and condition it, or if they do not so exist, knowledge is restricted to certain conditional appearances and cannot reach the conditioning reality itself. In the one case experience is regarded as the product of known subjective and objective factors; in the other as having an unknown source beyond known existence. But in either case ultimate reality, or reality as it truly is, seems unknowable. In Spencer's doctrine, which may be said to combine sensationist and intuitionist strains, known existence, both subjective and objective, is taken as

[1] One may take these antitheses as in the main coincident, without discussing their relation or their precise significance. *Cf.* p. 145.

belonging to appearance and not reality, while the distinction between them is accepted without adequate inquiry into its source in experience. It is only when we are thorough with the start from experience that the subjective and the objective are seen to be, as known existents, features within our experience and yet a valid characterization of reality. For, while subject and object are indeed known only relatively to each other, they express in their varying and advancing correlation precisely the degree in which reality is known.

What alone is meant, then, by a reality existing beyond the limits of experience, and therefore outside the pale of knowledge, is that what we *do* know always implies more to be known, or that what we know is never fully known. But the very terms of its assertion signify that it is knowable. All our experience implies a beyond—an unknown correlative to the known; but in order to have any meaning for us at all the reality must be continuous with our experience, and indeed constitute the very truth or reality of it. And this involves[1] that much that is not definitely characterized may be known indefinitely in anticipation of more definite knowledge—that the unknown reality is not wholly unknown, and that it is what as knowledge advances becomes progressively known; for knowledge becomes definite only by defining what is indefinite, though none the less real. In fine, knowledge and existence, though not coincident, are of a piece with each other. However far, then, unknown reality may transcend our specifically human experience, this experience is itself intimately linked with the reality beyond, and has its whole significance in being a progressive apprehension of and participation in *real* existence.

[1] We shall see this more fully in later chapters.

Before passing on to trace the further stages in the problem of the relation between experience and reality, it is necessary to append to the present chapter a few paragraphs concerning the bearing of the doctrine of unknowability on the method of philosophy and the relation of philosophy to science. Spencer is not only the foremost protagonist of unknowable reality, but also the chief English exponent of the conception that philosophy is equivalent to the totality of science. And there is an intimate connexion between the assertion that knowledge is wholly confined to phenomena or appearances, as distinct from the reality manifested in appearances, and the conception of the identity of science with philosophy. We have to ask, What modification of the positivist view of philosophy is involved in the correction of the agnostic theory of knowledge ?

Spencer defines philosophy as the system of the sciences, or knowledge as a coherent whole. The function of science, he says, being to organize or unify knowledge, by means of analysis and synthesis, or generalization and reconstruction, that of philosophy is to carry this unification to completion by organizing the various branches of science. In the words of his definition : " Knowledge of the lowest kind is *un-unified* knowledge; science is *partially-unified* knowledge; philosophy is *completely-unified* knowledge." [1]

But if the sciences are to be systematized and knowledge made coherent, it must be according to some definite method or principle. Spencer's principle for the classification of the sciences is their degree of abstractness or concreteness. A science is concrete in proportion as it deals with anything in respect of the full actuality of its being, abstract in proportion as it disengages the

[1] *First Principles*, § 37.

properties and relations of things and treats of these by themselves. The limit of abstractness is where all other attributes are neglected save the most general relations under which things are presented to us. Thus Spencer arrives at his tripartite classification of the sciences as falling under concrete science, abstract-concrete science, or abstract science; which deal respectively with existences in their complexity or as totalities, with the several factors or aspects which complex existences present, and with those forms of relation which obtain between all varieties of existence.[1]

As regards the interrelations of the sciences as thus classified, Spencer, while denying that there is any hierarchy or serial order of the sciences, such as is presented in a scheme like Comte's,[2] emphasizes their mutual dependence and influence. This interdependence and reciprocity of all spheres of investigation is a constant and an ever-increasing feature of their progress. "Throughout the whole course of their evolution there has been a continuous *consensus* of the sciences"—a co-ordination of their processes and results which has been at once the outcome and the index of each stage in the development of knowledge and the point of departure for the next.[3]

The sciences are to be co-ordinated by generalizing their several generalizations so as to reach a principle more general than all, and then using this principle to reinterpret the conclusions that have been reached by

[1] *Classification of the Sciences* (*Essays*, 1901 ed., vol. ii), especially pp. 76-8, 99-103.

[2] It is worth noticing, however, that the methods employed by Comte and Spencer for making a classification of the sciences are virtually identical, and that the difference in their schemes tends, so far at least as the main principles are concerned, to disappear in the actual working of their organization of knowledge.

[3] *Genesis of Science* (*Essays*, vol. ii), pp. 27-9.

each science separately. Philosophy thus partakes of the character of science generally—it combines an inductive with a deductive aspect. Moreover, this highest generalization, which is the foundation or starting-point for the philosophic reconstruction of the results of the sciences, has somewhat of the nature of a hypothesis or provisional assumption until it is itself interpreted and justified through its explication of experiential detail. The principle of the persistence of force or conservation of energy, which is the ultimate and universal concept of Spencer's philosophy, is posited both as the ultimate presupposition of science and as implicated in each and all of the most general forms and antitheses of consciousness. "The sole truth," he declares, "which transcends experience by underlying it, is thus the persistence of force. This, being the basis of experience, must be the basis of any scientific organization of experiences. To this an ultimate analysis brings us down; and on this a rational synthesis must build up."[1] To this principle, accordingly, Spencer looks for the proof of all lesser or subordinate principles that claim acceptance as expressing duly ascertained knowledge. The law of evolution, which is his own widest generalization from the findings of the sciences, is itself held as proved by its derivation from this fundamental postulate that he finds involved in their working and in the very structure of knowledge.[2]

But Spencer's method of setting about the classification

[1] *First Principles* (3rd ed.), § 62.—Spencer reminds us in the same paragraph: "By the persistence of force, we really mean the persistence of some cause which transcends our knowledge and conception."

[2] §§ 146-7. — In a criticism of Spencer's conception of the nature of philosophy, Sidgwick remarks on his application of the formula of evolution as illustrating that defect of a too abstract procedure which we have already found in the case of Hobbes's philosophy (*Philosophy: Its Scope and Relations*, lect. i, §§ 2 and 3). *Cf.* above, p. 42.

of the sciences and of effectuating their unity has a defect which is the counterpart of his doctrine that knowledge is only of appearance, and not of reality. The implication of his procedure is that philosophy is in no respect anterior to science. This omits an essential feature in the relation of philosophy to the sciences. Spencer himself endorses Bacon's metaphor of the trunk and the branches.[1] But, as we saw, the full force of this metaphor is not exhausted in the conception that " the sciences had a common origin," or that as knowledge progresses there is a gradual differentiation of sphere and of function. It signifies that they have no life apart from the parent stem. Spencer recognizes this to a certain extent in maintaining that " the sciences can be advanced only by combining them," and that the complement of their differentiation is their increasing integration. The sciences, he says, not only diverge ; they reunite. " They inosculate ; they severally send off and receive connecting growths ; and the intercommunion has been ever becoming more frequent, more intricate, more widely ramified."[2] But if the sciences diverge from a common root, and if they are dependent for their growth on maintaining their contact with the originative life, or their unity as a single complex function, then philosophy must have another significance than that of being only a posterior co-ordination of the results of science. If the sciences are outgrowths from philosophy and advance only by ' ingrowths ' into the common life, then their results can be co-ordinated, and the sciences themselves classified with a view to such co-ordination, only by reference to

[1] *Genesis of Science*, pp. 28-9 ; *Classification*, p. 94.

[2] " There has all along," he continues, " been higher specialization, that there might be a larger generalization ; and a deeper analysis, that there might be a better synthesis. Each larger generalization has lifted sundry specializations still higher ; and each better synthesis has prepared the way for still deeper analysis " (*Genesis of Science*, p. 29).

the principles upon which they have severally diverged and the consequent significance of their redintegration. The method by which the sciences are to be arranged and classified cannot be anywise different from the mode of their origin. And it must be the function of philosophy, as the source and means of their differentiation, to give import to the co-ordination of science by showing the significance of the several inquiries in the common life of the whole.

It is indicative of the necessity of some sort of prior or fundamental inquiry that Spencer himself begins his 'system of philosophy' with a criticism of knowledge. This epistemological basis gives its general character to his own system of knowledge. He holds, as the outcome of his criticism, that the true or actual nature of reality is unknowable, and that the ideas by which we endeavour to apprehend and express this nature not only fall short of being adequate to it, but are merely appearances, or phenomenal and symbolic knowledge, intrinsically other than a knowledge of reality. None the less these symbols whereby we represent to ourselves the unknowable reality are held to be combinable into a system of knowledge. Philosophy as signifying a knowledge of reality having been set aside as impossible, it remains in the form of a co-ordination of the sciences as a knowledge of phenomena. But neither the place of the several sciences in the scheme of knowledge nor the significance of their results can be determined otherwise than through their affording—each in its own character and measure—a knowledge of reality. The whole meaning of a system of knowledge is falsified by the conception of an inscrutable reality that falls outside it—an indeterminate somewhat that is acknowledged in respect of its existence while considered unknowable as regards its nature. Even if, as we have seen

to be the actual significance of Spencer's conception, the reality always and inevitably eludes our definite apprehension, the very statement that a consciousness of it constitutes the basis of our experience implies a deeper than any distinctively positive or scientific knowledge. Spencer's own criterion of the sciences—their degrees of abstractness and concreteness—is meaningless except as signifying that their several materials or contents are in varying degree abstractions from reality. And without the possibility of expressing, however inadequately, the character of this reality as the inmost truth of our experience, there is no means of interpreting the relations of the sciences or evaluating their results in reference to our life generally.[1]

Thus any fully articulated scheme of the sciences, and any systematization of their conclusions in order to their forming a totality of knowledge, presupposes a more fundamental standpoint than that occupied by any or all of the separate inquiries themselves, and has no significance apart from yielding a progressive knowledge of reality. We shall see as we proceed that the discipline logically precedent to the special sciences is—not simply a theory of knowledge, whether its conclusion be that reality is unknowable or that it is essentially the knowable—but a fundamental investigation of the nature of experience as the basis of all subsequent or subordinate inquiries and the criterion of their scope and significance ; or at the very least an effort to express to ourselves the inwardness of things, as suggested in the innermost character of our experience, and the meaning of the several aspects of existence as features in our life or experience as a whole.[2]

[1] *Cf.* the definition which H. Bergson somewhere gives of philosophy as—not 'une généralisation de l'expérience,' but '*l'expérience intégrale.*'

[2] *Cf.* pp. 223-5.

CHAPTER VII

EXPERIENCE THE MATERIAL OF REALITY

THE history of English philosophy, we have found, presents a progress in the direction of transcending a merely representational view of knowledge. The inquiry into the nature and implications of experience, as the basis or the character of our knowledge of reality, has led on from an external opposition of experience and reality and a consequent doubt concerning the significance of knowledge, to the conception that, even if reality always transcends definite knowledge, it is at any rate such as it is the nature of knowledge progressively to know. We have now to see how this development is advanced a stage further by the identification of reality with experience.

The way of escape alike from the representational doctrine of knowledge and the agnostic conclusions which result from it, is opened up when it is recognized that reality is at all events not related to knowledge in a way that is adequately expressed by saying that things exist precisely as we know them, quite apart from our knowledge of them. There can be no duplicate existence of ideas and things—subjective states and objective facts—one of which simply copies or repeats the other. For (to state the matter quite generally) unless the things are somehow already known, there is no means of knowing whether the copy conforms to the original or not, and no

means of knowing even that there are things to know. The supposition underlying all forms of doctrine that sever knowledge from reality is, that *either* things must be known immediately *or* only mediately through ideas or conscious states which are alone immediately known. But the alternative is fallacious, since 'ideas' and 'things' are known only in relation to and distinction from each other as equally indispensable aspects of our experience.

We have seen that the earliest distinct statement in English philosophy of the principle, that subject and object are to be viewed in the first instance as a distinction within the content of knowledge and not as characterizing existence apart from it, is contained in Ferrier's philosophy. A recapitulation of his doctrine will be in place before we proceed further.

Knowledge, Ferrier maintains, involves two distinguishable though inseparable factors—the subjective and the objective. But this does not mean that the subject and the object are two existents which between them engender knowledge: it means that they are two elements or features of what is known. The distinction between them is a distinction within experience and cannot be made a basis for an account of its origin. Subject and object (or mind and matter) can never therefore, Ferrier argues, be known as independent of each other or of their relation in knowledge. What alone is known or knowable is mind and matter in correlation with each other.[1]

[1] Ferrier's precise assertion is that 'self' and 'not-self' are always known along with each other—that knowledge is of oneself together with whatever else is known (*Institutes of Metaphysic*, sect. i, prop. 1, obs. 13; prop. 22, obs. 15). This, however—as meaning that there is always an explicit distinction of subject and object—is not essential to the principle implied. On the development of the distinction see, *e.g.*, Adamson, *Development of Modern Philosophy*, vol. i, pt. v, chap. i; and *cf.* Bradley, *Appearance and Reality*, pp. 89, 460, etc.

Consequently, when we proceed to characterize existence in conformity with the ascertained character of knowledge, we are entitled to affirm that they do not exist otherwise than in mutual dependence and correlation.

This principle, he claims, gets ample confirmation from the history of philosophy in the fact that, when subject and object are taken as a distinction of existence outside knowledge instead of a distinction within it, they can never be brought into connexion with each other. Either they stand apart in complete separation or each in turn is emphasized at the expense of the other. But the subjective and the objective are not thus separable. What is known is never an object apprehended as existing quite apart from the knowledge of it, nor is it the apprehension without any object distinguishable from it. It is neither (as in Reid's view) an independently existing material world, nor (as in Locke's) an object wholly coincident with the apprehending idea. It is always object in union with and yet distinction from subject ; or an apprehended somewhat that is distinguishable though inseparable from its apprehension.[1]

But while Ferrier thus avoids making assumptions as to what is requisite to originate knowledge or experience, and proceeds instead to inquire what it is in itself, he does not avoid assumptions with regard to its nature. Although he claims for experience its right to be regarded as the only source of truth, and protests against any limitation of the term ' experience ' which implies that it signifies aught but the sole basis of our knowledge, he yet distinguishes between two kinds of experience, and on their supposed

[1] III, 9, obs. 28-34 ; *cf. Philosophical Remains* (*Works*, vol. iii), pp. 281-5.—The conclusion of Ferrier's *Metaphysic* (sect. iii, prop. 11) —the necessity of ' an infinite and eternal mind in synthesis with all things,' which he claims to prove by strict reasoning from his starting-point—may be regarded as a stepping-stone between Berkeley's doctrine and Green's (*cf.* pp. 68, 150).

antithetic character his whole procedure is based. "I do not," he says, "abandon experience as the ultimate foundation of *all* knowledge ; only I maintain that there are *two* kinds of experience, both of which are equally experience, the experience of fact and the experience of pure reason."[1] 'Experience' in a narrower sense is opposed to 'reason' as the contingent and particular to the universal and necessary. Reason is conceived to be the source of necessary truths or principles which experience can at most only corroborate.[2] Elsewhere[3] he says that such principles, like all else, are to be referred to experience—to an experience of their necessity. But his conception of the necessity of any principle and his mode of establishing it vary between considering it ascertainable by abstract reasoning and as an implicate of concrete experience. The same antithesis appears in Ferrier's depreciation of sense. His polemic against 'sense-experience' is valuable, so far as his contention is that sense is only one factor or aspect in knowledge and does not furnish data that are themselves separate items or 'completed objects' of knowledge. And he maintains that sense and intellect together constitute but one function of knowledge and are impotent apart from each other.[4] But he nevertheless regards the character of intellect or reason as ascertainable independently of the sense-experience with which it is its function to unite. Knowledge is thus treated as an instrument having a nature of its own independent of the data to which it happens to be applied. From knowledge so viewed there is no

[1] In a letter quoted in Miss Haldane's *James Frederick Ferrier*, p. 80. This passage expresses Ferrier's attitude more succinctly than any in the *Institutes* or *Remains*.

[2] *Institutes*, Introd., § 84: "Experience may confirm the truth of [such a principle]; but reason alone can establish it effectually." *Cf.* i, 1, obs. 10, 11. [3] I, 10, obs. 6. [4] I, 10, obs. 7 and 28.

passage possible to a characterization of being. Ferrier's transition is accomplished through the assumption that reality, or truth about reality, is not self-contradictory ; that is, that knowledge proceeding as alone it can is knowledge of reality.[1] This may truly be, as he says, a (or the) postulate of all knowledge. But it is thoroughly inconsistent with his own treatment of knowledge in separation from what is known. As against Ferrier's mode of statement, what requires to be maintained is that knowledge has no being independent of that which it interprets, and that only by abstraction can it be viewed as invested with a character of its own.

When, however, we rid Ferrier's philosophy of the initial abstraction of the nature of knowledge from that of being, and the consequent transition to existence by means of an unproved assumption, what this theory imports is a penetrating apprehension of the meaning of the start from experience. The principle of Ferrier's method is that we must allow all questions of existence 'to be determined by the result of the inquiry into the actual character and constitution of knowledge.' But if the nature of knowledge is independent of that of the reality known, this procedure is futile. It can seem feasible at all only by transforming formal conditions into actual existents, or prejudging the nature of reality on the basis of an abstract treatment of knowledge. If, on the contrary, knowledge and reality are not considered as in any way independent, and are allowed to disclose their characters only through an examination of what they are in relation to each other, Ferrier's conception then resolves itself into an assertion of the ultimate implication of the experiential method. This implication is, that as experience is our sole criterion and warrant

[1] III, 3, obs. 1.

for the being of anything whatsoever, the problem of being *is* the problem, what anything is for knowledge. Reality is, for any consciousness, only what it is known or experienced as being.

The significance of the method initiated by Ferrier is brought out more fully in the *Exploratio Philosophica* of John Grote; who, moreover, presents a view of the experiential basis of knowledge such as on the whole underlies present-day discussion in philosophy. Grote's exposition of philosophic principles is throughout interwoven with comment on the procedure of his predecessors in English philosophy; and the account he gives of the distinctive problems, and of some of the fundamental notions of philosophy, may be regarded as both an early and a typical expression of conceptions current in recent inquiry.

The chief source of philosophic error and antagonism, which Ferrier finds in the lack of accurate definition of problems, Grote describes as the confusion between different viewpoints.[1] The first requisite for the furtherance of any inquiry is a clear understanding of the point of view from which it has to be undertaken; which is equivalent to an apprehension of what the inquiry precisely is. If we fail to discriminate the standpoints of different investigations, the inevitable result is that each of them suffers, and either no distinct answers are obtainable or such as present themselves are misconceived by being given a false significance. In especial, Grote insists, we must distinguish between the philosophic and any of the more specialized scientific standpoints. The former gives the fundamental and the only possible complete view: the latter always involve an abstraction which is made for the purpose of some particular inquiry.

[1] *Exploratio Philosophica*, pt. i, Introd., especially pp. ix-xv.

In general any inquiry fails of being philosophic in so far as it treats either knowledge or existence as independent of the other. In the view of physical science, for example, things exist quite the same whether they are known or not. From this point of view the existence of things is the prior fact, and consciousness or knowledge of them an inessential supervening fact. From the epistemological standpoint, on the contrary, knowledge is the essential fact and existence a secondary or subordinate one. Unless we recognize these differences there will be continual confusion both as to the nature of our inquiries and the import of their results.[1]

As regards philosophic method this conception implies, in the first place, that the viewpoint of psychology is inadequate in philosophy. Grote, like Ferrier, is concerned to differentiate the philosophic inquiry from all treatises on the 'philosophy of the human mind,' of which the characteristic feature is that they do not keep distinct the problems of psychology and metaphysics. The confusion of the two points of view usually appears (as in Locke's philosophy, and again in Hamilton's) in the twin assumptions of a material world existing independently of being known and a mind or consciousness which knows this independently existing world. Or, if this supposition is rejected (as in the doctrines of Hume and Mill), the confusion is still apparent in any account of consciousness that deals with it as at once the only originative source of the content of knowledge and one special object of investigation among others. In opposition to such procedure Grote contends that the inquiry for which all known existence is phenomenal to consciousness, and has no existence apart from consciousness, is fundamentally different from that in which consciousness is viewed as

[1] Chap. i; *cf.* pp. 83-4, 109-10.

itself an existent conditioned by other existents.[1] The one is the philosophical, the other the psychological problem. But when this distinction is recognized (as in Ferrier's treatment) and consciousness is made the sole means of reference concerning the character of any and every existent, it is still requisite to discriminate the logical and the metaphysical standpoints.[2] The counter abstraction to the investigation of existence taken apart from its relation to the consciousness of existence is the investigation of knowledge apart from consideration of what is known. Knowledge, so viewed, is an instrument applicable to any conceivable reality that conforms to its inherent constitution, but itself independent of the reality known. On this supposition knowledge is no longer inessential to the facts, but the facts that come to be known are inessential to the nature of knowledge. The inevitable result of such an assumption is that unless we subsequently surmount our limited viewpoint we ' realize our notions,' that is, mistake our logical abstractions for realities ; which usually issues in the supposition that we do not know reality as it is but only such modifications of it as are conformable to the principles of knowledge, or, if this conception is avoided, in the assumption of a pre-established harmony between knowledge and reality.[3]

When, however, we adopt the fundamental or philosophical viewpoint, we cannot assume either that knowledge and existence are independent of each other or that they require to be extraneously connected by the supposition of an inexplicable congruity between them. For the conception of being and knowledge as happening somehow to be conformable to each other, there must be substituted a standpoint whence it can be seen that each

[1] Pp. 163, 177.

[2] Grote's exposition is not itself always quite free from confusion between them.

[3] Pp. 17-8, 182-3.

is an abstraction from the reality which always includes both features—a knowing and a known. Only because knowledge, taken by itself, is an abstract feature of the concrete reality of our experience, can we say that reality is essentially knowable or that knowledge is essentially knowledge of reality. And in the same way existence severed from knowledge is a travesty of the full reality of experience. The principle which Grote's philosophy presents as 'the *basal* fact' of experience—the union of knowing and being in one concrete reality—is indeed already contained in Ferrier's statement that 'knowledge of existence is alone true existence.' But Grote is truer than Ferrier to the implications of the doctrine both as regards the nature of knowledge and the interpretation of reality. For in his view, as we shall presently find, there is no essential opposition between thought, as the form or character of knowledge, and sense as supplying or constituting its material; since the form of knowledge is nothing else than the character or meaning already latent in its material, which awaits—not moulding, but elicitation or recognition.

To pass now to the outcome of this statement of method: Grote's initial contention is, like Ferrier's, that we cannot begin our philosophy from any assumption as to existence supposedly independent of the knowledge of it. We cannot, for instance, assume a material world existing independently of being known and a mind or consciousness which knows this independent existence. For the ultimate fact—'the basis upon which all rests'—is not simply the existence of anything, but the knowledge or thought of it as existing: the existence of anything is ultimately indistinguishable from its knownness or knowability.[1] Or as he puts it briefly in one passage:

[1] *Explor. Philosophica*, i, 59; *cf.* Introd., p. xiv.

"All that we call existence is for us *a thought* of ours." When once we have 'by a comparison of experiences' definitely conceived the existence of anything, we may give our attention to it as existing, leaving out of consideration meanwhile the relation of this to its being thought or known as existing; just as we may also look at knowledge in abstraction from the nature of what is known. We may concern ourselves (as Grote phrases it) to 'know about' what we are already 'acquainted with'; but our acquaintance with it—our fundamental *experience of* it—is what gives it existence for us.[1]

Experience accordingly does not consist originally of facts about or upon which thought (or knowledge) is engaged. It may be described, Grote says, as notice of fact or as fact presenting itself to our notice; but it is not fact *and* notice of it, for these two are the same in different words.[2] Experience has always two aspects; which may be called 'immediateness' and 'reflexion.' Reflexion is the characterization of what, apart from this, would be characterless or meaningless. Without immediacy there would be no reality or truth to know; without notice or acquisition of meaning (definiteness, however slight), there would be nothing known.[3] "So far then," he maintains, "as there are two elements of our knowledge, they are not thought and experience (that is, what is commonly meant by these words), but immediateness and reflexion. Only, it is to be observed, these constitute no antithesis—they stand in no contrast the one to

[1] On the nature and significance of this distinction between 'knowledge of acquaintance' and 'knowledge of judgment,' see pt. i, pp. 60 *ff*, 122-4; ii, 201 *ff*; and *cf.* James, *Principles of Psychology*, vol. i, pp. 221-3.

[2] Pt. ii, p. 226.

[3] II, 147, 159, 218-21. *Cf.* the distinction of sentience and thought as stated in Prof. Stout's *Analytic Psychology*, bk. i, chap. i, §§ 3, 4.

the other. They are not, *e.g.*, anything that can be called the matter and form of knowledge, for reflexion gives no *form*, no new being or reality to immediateness : they are more like the body and soul of knowledge, except that immediateness has all the *life* of knowledge, though as yet embryonic and undeveloped : all it wants is quickening : till reflexion does this, it is knowledge in the germ, but not proper knowledge." [1]

It is involved in this conception that there can be no distinction between 'subjective' and 'objective' contributions to knowledge or different sources and natures for 'principles' and 'facts.' The subjective and the objective are fundamentally the knowing and the known as two united though distinguishable aspects of our experience.[2] The unity of subjective and objective in a common reality or concrete experience is the basis and the warrant of whatever is known. This is immediacy of experience. The distinction of them, which is notice or definition of immediacy, is the root of knowledge. All consciousness involves these two aspects. Without the indifferentiation of being and knowing nothing would be knowable, and without their differentiation nothing would be definitely known. The function of knowledge is the progressive definition or characterization of what is contained in immediacy. "This," says Grote, "is knowledge in virtue of its uniting trueness with definiteness : it is true so far as it is a real development of the original trueness or fundamental experiences : it has definiteness given to it, and is thus made into knowledge by reflexion, which reflexion or distinctification must not be such as to alter the trueness." [3] Experience, therefore, cannot be regarded (with Reid or Ferrier) as implying an element

[1] *Explor. Philosophica*, ii, 156. [2] I, 22-3, 47-8 ; ii, 180-3.
[3] II, 182.

which is the contribution of the object or of sense, and which requires to be supplemented by an element of thought contributed by the mind or subject. Nor can knowledge be described (after the manner of Locke and his followers) as arising in the mind without any production or spontaneity, from data which are supposed to originate from anything existent or are viewed as if they so originated. For, on the one hand, the immediacy which is the basis of knowledge is the source of whatever the most developed knowledge contains—'relations' as well as 'qualities';[1] and on the other hand, without notice or characterization there is no knowledge of any one thing in distinction from any other.

On immediate experience then, according to this view, all knowledge is based; and it arises wholly by way of notice (or appreciation)[2] of what is involved in this. The distinctions of subject and object, mind and things, like all other determinations, arise from and are again referred to it. The subject and the object[3] are in every instance what are over against each other as distinct though united features of experience. As knowledge progresses these two develop into an explicit distinction of self and not-self, consciousness and its existent objects. But although they arise out of indistinction, they never altogether fuse or are other than complementary features of reality. What we call existence is this reality, in which self and not-self antithetically participate, as in any measure defined or characterized.

The conception of experience here presented raises

[1] *Cf.* L. T. Hobhouse, *Theory of Knowledge*, pt. i, chap. ii.

[2] In 'notice' or 'attention' the cognitive joins hands with the conative or practical; 'appreciation' signifies rather its relation to feeling (*cf.* Chapter IX, p. 211).

[3] Subjective and objective seem ultimately coincident with immediate and reflected. *Cf.* S. H. Hodgson, *Metaphysic of Experience*, vol. i, pp. 72-5 (see below, pp. 189-90).

questions that take the place of those it transcends ; but it gives a more concrete basis than any afforded in the preceding theories which we have examined. As already said, it is a view such as mainly forms the basis of present-day discussion of philosophic problems. Even when the topic of discussion is precisely the general nature of the experiential source of knowledge—say, its subjective and objective reference, or its representational and functional aspects, or its character of immediacy and mediation—present controversy moves for the most part within the general confines of such a view as this. Its main import is its recognition that experience is not to be accounted for by reference to anything outside itself, that its combined subjectivity and objectivity are to be vindicated without annulling its unity, and that ' sense-qualities ' and ' thought-relations ' are not to be regarded as having different sources or fundamentally diverse natures. The general view of experience implied may be thus summarized, in a way that indicates both its own character and its relation to the other conceptions we have discussed :—Experience is never only subjective or only objective. As the source of knowledge it is essentially one, and yet is never without a dual character. It does not consist of irrelative items that are either impossible of relation or await relation from without : its terms are discrete, but their relations are continuous. And it is always the passing of the relatively indeterminate into the relatively determinate, or the acquisition of meaning by what is real though undefined. There is no immediate knowledge, yet no knowledge other than interpretation of reality as present in immediate experience ; and none that is merely mediate, for knowledge always involves a basis or warrant in the real. In fine, immediacy of experience is our point of contact with reality ; and

reality can be characterized only through a progressive coincidence of mediacy and immediacy.

The significance of the conception of experience just stated lies, in the first instance, in giving a theory of knowledge according to which it is essentially a continuous outgrowth from sentience or immediate experience as the source or medium of all apprehension of reality. But this conception suggests, further, that the reality which knowledge interprets is continuous in its existence and nature with the experience of it. Not only does experience constitute the sole means or the entire character of our knowledge of reality ; it is the very material or the constitutive character of reality itself. This principle is already indicated in Berkeley's identification of things with ideas, and gives its whole point to Hume's equation of the idea of anything and its existence. These are first statements or anticipations of the doctrine that reality and experience are essentially one. But it is only as the theory of knowledge advances that this implication of the start from experience gets expressly formulated. When once this is done (we shall find), the problem of the nature of reality becomes definitely one with that of the nature of experience.

The first explicit identification, in English philosophy, of experience and reality is contained in the metaphysical portions of the writings of T. H. Green. Like the work of Ferrier and Grote, and even more distinctly, Green's philosophy is of the character virtually involved in the procedure of English philosophy from its beginning—it is a critical philosophy, which sets out by inquiring not directly as to the nature of reality, but as to what is implied in the knowledge of reality, or in reality's being known. Green shows that experience is possible only in

case that knowledge and the reality known have a common principle or nature. There can, he contends, be no true antithesis between reality and the work of the mind in apprehending it, or between the matter and the form of knowledge. For any supposed existence that could be distinguished from and opposed to knowledge would already be so qualified as to be related within it. Thus, even if it be admitted that consciousness is conditioned by material existence, viz. matter and motion, in the sense that they as known objects of consciousness are required to explain particular mental facts or functions, consciousness cannot originate from these as though they had a reality prior to or apart from it ; since matter and motion, as known, express relations between constituent elements of experience, and cannot therefore explain the possibility of there being experience as a consciousness of reality at all.[1]

In the first place, experience cannot be only—or be wholly the product of—a series of events, or process of change, occurring as an order or course of nature independently of all consciousness of it ; for a knowledge of change implies a permanent or continuous consciousness through relation to which the several stages of the process are apprehended as constituting a connected series. Such a consciousness is *a* (even if not *the*) source of relations.[2] But further, since knowledge consists wholly in relating, that is, in distinguishing and unifying ; and since, conversely, all qualities are constituted by relation of one kind or another ; what is unrelated cannot be any known reality. The simplest perception of fact, for example, involves that the fact gets related by or in the knowledge of it ; and we can say what the precise nature (or reality) of this or of any fact is, only by inquiring how it is related.

[1] *Prolegomena to Ethics*, § 9. [2] §§ 15-8.

What we call reality or nature then, Green maintains, must, in order to be known or knowable, be a system of relations or related facts; and since a knowledge of relations is (and is always in practice accepted as) a knowledge of reality, the relations themselves must be one in source and principle with the knowledge of them.[1] Green expresses this conclusion by saying that nature itself implies a spiritual principle—a self-consciousness through relation to which its facts are constituted.[2]

But if this is so, there can be no duality of existence and knowledge in the sense that either of them is independent of the other. Any separation between "the process of experience on the one side and the facts experienced on the other" is untenable. "It renders knowledge, as of fact or reality, inexplicable. It leaves us without an answer to the question, how the order of relations, which the mind sets up, comes to reproduce those relations of the material world which are assumed to be of a wholly different origin and nature."[3] The truth would rather seem to be that relations, and therefore reality, exist only as being known or experienced. "It is not that first there is nature, and then there comes to be an experience and knowledge of it. Intelligence, experience, knowledge, are no more a result of nature than nature of them. If it is true that there would be no intelligence without nature, it is equally true that there would be no nature without intelligence."[4]

The process of knowledge accordingly must not, Green insists, be regarded as one in which wholly extraneous facts somehow come to have similitudes or symbols of themselves in consciousness. The facts and the knowledge of the facts, or experience and the world that is

[1] §§ 20 *ff*, 43 *ff*. [2] § 52. [3] § 34. [4] § 36.

experienced, are realized in mutual and progressive correlation ; and we can account for there being a process or progress in knowledge at all, only by holding that it is the gradual realization in the human or finite mind of a system of reality already constituted through relation to an infinite and eternal consciousness, and that this consciousness is itself operative in the progress towards the apprehension, by us, of what already exists for it.[1] In his own words : " The growth of knowledge on our part is not a process in which facts or objects, in themselves unrelated to thought, by some inexplicable means gradually produce intelligible counterparts of themselves in thought. The true account of it is that the concrete whole, which may be described indifferently as an eternal intelligence realized in the related facts of the world, or as a system of related facts rendered possible by such an intelligence, partially and gradually reproduces itself in us, communicating piecemeal, but in inseparable correlation, understanding and the facts understood, experience and the experienced world."[2]

The main result of Green's philosophy is, therefore, that reality not only cannot be known otherwise than as experienced reality, but can only be reality by being experienced. He expresses the relation between reality as we know it and reality as it is in its full completeness, in the conception that our knowledge is the " reproduction of itself in the human soul by the consciousness for which

[1] §§ 66-70.

[2] § 36.—Green's precise doctrine is thus (1) that all relations are constituted by a single self-distinguishing and self-identifying consciousness, and (2) that our human experience is the gradual self-communication to us of this eternal consciousness. Whatever may be the inadequacies of this doctrine, its most fundamental tenet yet holds good—namely, that the process of finite experience consists in the progressive participation in an infinite experience which is one with reality (*cf.* below, p. 211).

the cosmos of related facts exists "—a reproduction which is "at once progressive and incapable of completion." He illustrates this by reference to the operation, in the acquisition of knowledge, of a general conception as a determining factor in the detailed filling up of a form which it already outlines in advance; as, for example, when a general consciousness of meaning or of order operates in the apprehension of a particular meaning or order.[1] But he does not further define the nature of the process, or make sufficiently clear the distinction between the reproduced and the reproducing consciousness—between the experience that is a growing apprehension of reality and the experience that constitutes it. The crucial point in his doctrine lies in his treatment of the relation of knowledge to feeling or sentience.[2]

Green shows that the distinction of feeling and thought is untenable in the sense that knowledge arises (by association, for instance) out of facts which exist in the form of feelings anterior to and independently of knowledge. "Every effort fails to trace a genesis of knowledge out of anything which is not, in form and principle, knowledge itself."[3] He recognizes, moreover, that feeling and thought are inseparable, that there is no experience without both. "Neither is the product of the other. . . . Each in its reality involves the other."[4] Yet he dis-

[1] §§ 71-3.—For the fuller psychology of this process, see G. F. Stout, *Analytic Psychology*, bk. i, chap. iii, especially §§ 4, 5.

[2] Green's conception of the relation of knowledge to sentience lays his philosophy open to the same charge, in point of procedure and consequent outcome, as was stated above (pp. 107-8) in Ferrier's case.—For a criticism of Green's mode of establishing his principle, and also of his account of feeling, see A. S. Pringle-Pattison, *Hegelianism and Personality*, lect. i, and p. 79 *ff* (2nd ed.).

[3] *Prolegomena*, § 70.

[4] § 50. *Cf.* the further statement of the same paragraph: "It is one and the same living world of experience which, considered as the manifold object presented by a self-distinguishing subject to

tinguishes them in a way that precludes any but an adventitious connexion between them. Feeling, he holds, is essentially irrelative. "No feeling, as such or as felt, is a relation. . . . Even a relation between feelings is not itself a feeling or felt."[1]

There can, however, be no such absolute distinction as Green here draws between knowledge and feeling, or between feelings and relations. No doubt feeling lacks that definite apprehension of terms and relations which is characteristic of knowledge : it is just this among other points that distinguishes them. But the very reverse of Green's is the truer statement of the case. Feelings are or contain relations ; and relations between feelings are themselves feelings.[2] If knowledge is of relations or related terms, then feeling is at least an indefinite apprehension or appreciation of relations. The distinction between the immediacy of feeling and the mediacy of thought is tenable only as implying that knowledge

itself, may be called feeling, and, considered as the subject presenting such an object to itself, may be called thought."

[1] § 37.—With Green's account of the difference between thought and sense may be compared that of Caird, *The Critical Philosophy of Immanuel Kant*, vol. i, pp. 347 *ff*, 590 *ff*.

[2] *Cf.* Spencer, *Principles of Psychology*, vol. i, § 65. The following is an abridgment of the passage :—Consciousness consists of feelings (or thoughts) and the relations between feelings (or feelings as distinguished from thoughts). But the relations between feelings are themselves feelings ; only they are less conspicuous than other feelings—they are relational feelings. A relational feeling is a feeling accompanying the transition from one conspicuous feeling to another. The distinction between feelings and relations, then, is not absolute. Not only is a relation a kind of feeling, but just as a relation has no existence apart from the feelings which form its terms, so a feeling exists only by relation to other feelings which limit it in space or time or both. Neither a feeling nor a relation is an independent element in consciousness : there is throughout a dependence such that feelings have no character apart from the relations which link them, and the relations have no character apart from the feelings they link. See also James's *Principles of Psychology*, vol. i, chap. ix, especially p. 243 *ff*.

consists in defining and thereby making significant what is present in consciousness without such definition, yet without it lacks distinctness and determinate reference beyond itself.[1] But the terms and their relations must all alike have their own immediate character in order to their articulation in knowledge.

Green assumes that feeling or sentience can exist only as a sequence of successive and transitory moments of consciousness which come and go without leaving any trace of themselves behind. Hence he concludes that feelings are related only by virtue of the supervening or accompanying agency of thought. Recognizing that any sensation or feeling must get its character from its relations with others, and that in order to their relation there must be a transition from one to another such as gives a certain continuity between them, he finds the principle of connexion in a comparing—a distinguishing and unifying—function essentially 'other than' the successive feelings themselves.[2] We have seen that such a view is inadmissible.[3] Yet this by no means renders his doctrine null or his whole argument futile. Green's argument proves that any unity in reality, as the world of possible objects of experience, implies a corresponding unity of consciousness in the experience of it; and that, both in any particular phase or stage of knowledge and at its ideal limit, subject and object are reciprocal features alike in the constitution of experience and of reality. But instead of seeking both the unity and the correlative multiplicity on the objective as well as on the subjective side, he finds the principle of unity in the subject, which he identifies with thought or intelligence, and regards all change and plurality as characteristic of sense and objectivity. Green

[1] *Cf.* above, p. 143.

[2] *Prolegomena*, §§ 28-9; *cf.* 52, 54.

[3] *Cf.* pp. 91, 146.

shows, too, that our finite experience consists not in awareness of and adjustment to an alien or indifferent reality, but in realization of a nature of things which is one with our own nature, and the realization of which is therefore at the same time our own self-realization; although he confuses or inadequately differentiates the characters of the human and the eternal consciousness.

We may conclude, then, that the defect of Green's philosophy consists in or depends on its assumption that the conscious subject is logically prior to its object, and that thought is fundamentally different from feeling—knowledge from the ever-changing events or processes of consciousness which are phenomenal to it. But when this is said, his position is nevertheless valid as a counter-foil against the fallacy of assigning all priority to existence, and regarding consciousness as presupposing an already fully determinate object; and especially valuable in its insistence that 'nature' and 'spirit' imply an identity of principle, and that there is an absolute significance or supra-phenomenal reference involved in our experience. How to avoid the two pitfalls just mentioned—how to interpret the nature of experience and its relation to reality while conserving the truth and rejecting the error of Green's view—has been the fundamental problem of subsequent English philosophy. The doctrine most nearly related to Green's is that which we have next to consider.

On Green's view of knowledge there must either be an inexplicable pre-established harmony between feeling and thought, so that they fit in with each other without there being any passage from one to the other;[1] or else, in the

[1] This sort of conception he rightly discredits (*Prolegomena*, § 19) as an account of the connexion between the order of nature and the order of knowledge; and it is rather the other alternative that is the logical outcome of his own principles.—For a criticism of Green's

act of knowledge—the act of establishing relations—feelings are reduced to or transformed into the relations that are apprehended as holding between them. If we reject both of these alternatives (the one as affording no explanation and the other as explaining away the very point that requires to be explained), and at the same time continue to hold that thought is essentially engaged in instituting relations; then—unless indeed prior to thought there is nothing whatever to relate, in which case reality is actually made in the process of knowing it, and all distinction of sense and thought perforce disappears—knowledge must arise out of what is akin to it and yet is never identical with it, and feeling must signify what is (not irrelative, but) an experience which is both the source and the solvent of relations. This is the conception expounded in the philosophy of F. H. Bradley, which may be regarded as at once a development and a corrective of Green's position.[1]

The central point in Bradley's theory is the principle that every endeavour of thought to characterize reality results in contradictions, which testify that it has failed

---

doctrine (where conflicting passages are quoted from another part of his *Works*—vol. ii, pp. 72-81, 181-91), that suggests a solution of the problem of knowledge in terms of a 'harmony' between sense and thought but regards the latter as developing from the former, see S. H. Mellone, *Studies in Philosophical Criticism and Construction*, pp. 148-53. This mode of statement, however, needs to be modified in respect of its implication that the 'nature' or 'structure' of thought could be anything else than another aspect (or the complementary character) of that of its basis or correlate.

[1] Bradley's work, as well as Green's, is (notwithstanding its immediate historical connexions) essentially English in method and character, and makes its appeal expressly to 'the English mind' (see *Appearance and Reality*, Pref., p. xii).—From the following statement of Bradley's philosophy it will be seen that in its methodological aspect it may be said to unite the consideration of the actual content with that of the implications of experience, these being in fact inseparable and constituting a single problem.

to grasp fully the nature of the reality as actually (or potentially) experienced. In immediate experience distinctions and relations are merged in one whole of feeling, which thought in vain endeavours to express in such wise as to reconstruct it for our knowledge. In the attempt to elucidate the character of our experience differences and incoherencies emerge which cannot again be reduced to consistency and unity. To put the matter in a single general statement: Thought is essentially relational—that is, concerned in differentiating and comparing, in making connexions and distinctions, in assigning limits and determining relations; and this discursive process breaks but never restores the oneness of immediate feeling.[1]

Bradley's view, therefore, advances beyond Green's primarily in its emphatic refusal to abolish feeling in favour of knowledge—to treat sentience as reducible to thought, feelings as constituted by relations. Relations without terms or qualities are, he shows, impossible; for all relations imply terms, and the terms cannot be resolved into their relations. But contrariwise, qualities are equally meaningless apart from relations. If, on the one hand, there can be no distinction without a difference; on the other hand, wherever there is a recognizable difference there must be a previous distinction of some kind. In short, only where there are qualities can there be any relation, but where there are no relations there are no determinate qualities. In so far as feeling is relationless, just so far it is nothing distinct; and if it is not characterless, then neither is it void of relations.[2]

But while insisting on the inconsistencies and inade-

[1] *Principles of Logic*, especially bk i, chap. i, §§ 1-12; ch. ii, §§ 1-35, and 50 *ff*; bk. iii, pt. ii, ch. iv, §§ 7-15. *Appearance and Reality*, especially pp. 170-9.

[2] *Appearance and Reality*, chap. iii; *cf.* pp. 477-81.

quacies of discursive thought, and the consequent disparity between our knowledge and the reality it seeks to interpret, Bradley is equally unequivocal in opposing the doctrine that reality is inaccessible to knowledge inasmuch as the nature of knowledge and experience is one thing and the nature of being or reality another and a wholly different thing. Reality, he maintains, is not unknowable : indeed the assertion of a reality which falls entirely outside our knowledge and does not appear in it, is nonsensical. Our knowledge certainly consists of phenomena or appearances[1] which, as such, are inadequate to the nature of reality. But appearances nevertheless belong to and qualify reality, and have no other being or significance than that of affording, in varying measure, a knowledge of true existence.[2]

Bradley's philosophy is thus in the first instance negative. It is the denial, on one hand, that knowledge is ever identical with reality, and on the other, that reality is anything extraneous to knowledge. These negations are expressed in a trenchant criticism of the various preconceptions which assert or imply either that knowledge is wholly adequate to reality or that it is wholly inadequate. But this negative attitude is the counterpart of a positive doctrine. Knowledge is not reality; nor is the nature of reality alien to that of knowledge. These negative positions are rendered affirmative, if we can assert that reality is of one piece with knowledge and is indeed the complement of knowledge. This, reflexion

[1] " Facts and views partial and one-sided, incomplete and so incoherent—things that offer themselves as characters of a reality which they cannot express, and which present in them moves them to jar with and to pass beyond themselves—in a word *appearances* are the stuff of which the universe is made. If we take them in their proper character we shall be prone neither to overestimate nor to slight them " (Appendix to 2nd edition, p. 572).

[2] Chap. xii ; *cf.* pp. 486-9.

shows to be the case. In the first place, the material or content of reality is experience.[1] Whatever exists, exists in the character of being *experience*. The proof of this, says Bradley, is simple but decisive. "Find any piece of existence, take up anything that anyone could possibly call a fact, or could in any sense assert to have being, and then judge if it does not consist in sentient experience. Try to discover any sense in which you can still continue to speak of it, when all perception and feeling have been removed; or point out any fragment of its matter, any aspect of its being, which is not derived from and is not still relative to this source."[2] Reality as aught else than experience is unmeaning and self-contradictory. By 'experience' is meant, of course, what is no more subjective than objective—no more the feeling than the felt, the knowing than the known; but is rather the reality in which these distinctions can be made, but in which they exist only in indissoluble unity.

Being or reality, then, consists of or is 'one thing with' experience. But further, the essential character of knowledge is that, while it is distinct from reality—that is, from the full or concrete nature of actual existence—it implies this as at once transcending and completing itself. For, although thought or ideation involves a certain separation of itself from existence—an opposition between its own content and the reality which it seeks to know—yet its 'other' is not altogether another, but is the very completion of its own nature as knowledge.[3] Thought arises out of sentience or immediacy as the endeavour to interpret it by distinguishing and relating features and aspects within it, yet without thereby annihilating its character of immediate feeling. Knowledge is thus the search for unity in difference—for a whole in which

[1] Pp. 144-7; *cf.* 522-6. [2] P. 145. [3] Chap. xv, p. 175 *ff.*

differentiations are retained but reconciled ; while, as an actual fact of our experience, such a harmony remains ever an ideal which thought is unable fully to realize. And reality is—*for* knowledge—essentially an experience which holds differences united in an immediate and individual apprehension, and in which the greater the variety and diversity the more perfection is involved in their harmony. Thus reality *is* the perfect unity in variety which thought seeks to achieve or *become*, although in doing so it must needs lose its distinctive or separate character as thought. As Bradley himself expresses it : "The reality that is presented is taken up by thought in a form not adequate to its nature, and beyond which its nature must appear as an other. But this nature also is the nature which thought wants for itself. It is the character which . . . in all its aspects exists within thought already, though in an incomplete form."[1] "It is this completion of thought beyond thought which remains for ever an other."[2] Hence while knowledge never overcomes the distinction between itself and reality, the reality is the very goal and fulfilment of knowledge. Or, to put the same truth otherwise, knowledge is one aspect of reality, and could attain its own ideal only by being wholly blended with the other and complementary aspects of reality which are expressed in feeling and in will.

The significance of this doctrine lies in its insistence on the unity of experience and reality, combined with an assertion of the essential difference between the definite items of apprehension, which constitute the content of knowledge, and the concreteness of life or the full actuality of existence. Not only is our finite apprehension immeasurably far from expressing the reality of things, but—whether in reference to our own lives or the life of the

[1] P. 179. [2] P. 181.

universe at large—knowledge, with its characteristic abstractness and inherent generality, is a very inadequate substitute for the intimacy of feeling and the uniqueness of individual being. Yet just this effort of the finite to define the infinite is a necessary feature in an advancing participation in reality; and the reality itself can be nothing else than the unity-in-difference of all experience. The very character of knowledge as only one among other aspects of our experience, each of which is nevertheless essential to the whole, and the very insufficiency of our own individual experience to satisfy what we feel to be needful to the completion of our nature, require us to maintain that in reality all these several elements are alike transcended and reconciled, and all individuality is perfected.[1] We are justified, accordingly, in positing an absolute—that is, a complete and all-embracing—experience that unites all partial experiences in an infinite whole, while yet conserving the significance of each one of its manifold constituents; however inadequate our conception of such an experience must necessarily be.[2]

[1] It is perhaps the chief defect of Bradley's doctrine that it involves a certain ambiguity as to whether the difference or particularity in the universe is equally real with the unity. Is all diversity only phenomenal—distinctive of 'appearance'—while reality, on the contrary, is one and individual? Or is reality quite as ultimately many? Much of Bradley's statement, and nearly all its emphasis, would imply that the unity must outreach the plurality, in such wise that individuality belongs only to the whole. This cannot be upheld (*cf.* below, pp. 207, 209). McTaggart's position (*Studies in Hegelian Cosmology*, §§ 15, 21, 85 *ff*) partially rectifies this, but makes the unity 'a unity of system, and not of centre.' But it would seem rather that the unity of the universe, in being the unity (or community) of a multiplicity of diverse selves or individuals, must at the same time be an individual unity of experience. Only when we neglect the implications either of *selfhood* or of the *infinity* of reality, does it seem impossible to hold these two sides of the truth together. The form of conception which Royce maintains (*The World and the Individual*, vol. i, lects. ix and x; vol. ii, lects. vii and x) combines both aspects. *Cf.* Wundt, *System der Philosophie* (3rd ed.), i, 402-34.

[2] *Appearance and Reality*, pp. 159-61, 181-2; *cf.* 518-22.

The conclusion of Bradley's philosophy may therefore be stated in this way :—Knowledge is one aspect, but only one aspect of reality. It is distinct from reality, yet not as though either were anything apart from the other. Knowledge is not simply a transcript of reality, but rather reality in incomplete and one-sided expression. Our ideas do not express, qualities do not characterize, reality in separation from knowledge, but reality as relative to knowledge—reality as it is *in* or *for* knowledge. Ideas and existence, though they are always different, are thus not separate in their being. Ultimate or absolute reality is the complete union of knowledge and existence ; and anything short of full reality is shown to be such by a divergence between them. An experience not fully articulate and significant, and an idea not actualized in immediate experience—these proclaim themselves in every case to fall short of complete reality, which unites the definiteness of thought with the directness of feeling.

From this conception of knowledge and of the connexion and distinction that obtain between it and reality, there inevitably arises the question as to how precisely knowledge is related to will and feeling. In order to get the full significance of this question, which occupies in one form or other such a foremost place in the discussions of the present day, we must turn back once more and take a brief survey of one of the most characteristic aspects of the English development—its emphasis on the practical bearing of knowledge.

CHAPTER VIII

KNOWLEDGE AS RELATIVE TO PRACTICE

More than once in previous chapters there has been occasion to remark that English philosophy contains throughout its course a predominant assertion of the practical aspect of experience, and that this fact is intimately connected both with the experiential conception of knowledge and the correspondent doubt whether it is adequate to the interpretation of reality. The successive views concerning the constitution or structure of knowledge and the ever-recurring discussion of its limits have had as a basis of agreement the recognition that it has a practical value or validity. But within this general agreement there has gone—in close relation to the evolution of the theory of knowledge—a variation in the views which have been held concerning the relation between knowledge and action. Our next topic, then, is the development that has taken place in the conception of knowledge as related to practice.

The practical spirit which has characterized English philosophy from its very beginning is nowhere more evident and thoroughgoing than in the work of its founder. Bacon's philosophy both in aim and outcome is eminently practical. His writings abound in passages that assert or imply a connexion between knowledge and utility ; and his own enthusiasm for knowledge and the impetus given by his teaching to inquiry in the most

varied spheres of thought have as their basis the conception of its applicability or practical use.[1] Only a very superficial acquaintance with Bacon's works and a very insufficient appreciation of their spirit can leave the reader with the supposition that, while the utilization of knowledge is thus duly considered, its intrinsic nature and value are disregarded. Bacon is indeed disposed to overestimate—if that were possible—much rather than to undervalue the excellence of knowledge. It is his discernment of its boundless worth and the illimitable possibilities for the highest aims of life contained in the gradual acquisition of a solid body of truth, that makes his principles so far-reaching and his precepts so persuasive. How then does he view the connexion of knowledge with practice ?

Bacon's demand for discovery and invention—the application consummating the attainment of knowledge—signifies, in the first place, that the very nature and meaning of knowledge are to be found in its being instrumental in furthering the welfare of mankind, by giving that command of natural conditions and processes which is our only means of modifying in any degree the circumstances of our existence. "The true and legitimate goal of the sciences," as he puts it in one passage, "is no other than this—that human life be endowed with discoveries and powers."[2] To this conception, indeed, is due not only Bacon's whole design of a system of the sciences but the form of not a few of its most characteristic points. The thorough interdependence, for example, which he repeatedly urges as existing between the separate fields of inquiry, is part and parcel of the character he ascribes to

[1] *Cf.* above, pp. 9-11, 29.

[2] *Novum Organum*, bk. i, aphorism 81; *cf.* 124, 129. *Advancement of Learning*, bk. i, chap. v, § 11.

knowledge as a project directed to 'the relief of man's estate' through the augmentation of our power over natural forces. For this common undertaking can be forwarded only by the results of investigation in one sphere being made available in all.

But there underlies Bacon's reiterated conjunction of knowledge and power the further consideration that the test no less than the purpose of knowledge lies in its application to practice. In insisting that true knowledge will not be sterile but fruitful,[1] he has not solely in mind the use to which such knowledge may be put, but also the assurance its application gives that it is not mere assumption or theorizing. Just as we can govern nature only by insight into natural operations, and employ experiment either in the quest or in the use of knowledge only by availing ourselves of this insight to affect natural conditions, so we may be said to govern our own tentative efforts to know by bringing them to the test of practical application.[2] Thus for Bacon both the end and the proof of knowledge are to be sought in practice.[3]

The same emphatic assertion of the practical significance of knowledge is found in Hobbes. "The end of knowledge," he says in one of the opening paragraphs of his monumental work, "is power."[4] Science or philosophy (that is, science universal), which is the knowledge of the

[1] Not, like the spurious knowledge he condemns, 'fruitful in controversies, but barren of works' (Pref. to *Instauratio Magna*).

[2] *Cf. Novum Organum*, bk. i, aphorism 73: "Among the signs of truth and error none is more certain or excellent than that from fruits: for fruits and works (or applications) are, as it were, sponsors or vouchers for the truth of philosophies."

[3] For an interesting statement of the logical order of the fundamental ideas of Bacon's philosophy, see Ellis's General Preface (Bacon's *Philosophical Works*, vol. i), § 18; *cf.* K. Fischer's *Bacon*, p. 140.

[4] "Scientia propter potentiam." *Works*, vol. i (*De Corpore*), pt. i, chap. i, § 6. This comes as near as anything in Bacon to the proverbial "Knowledge is power."

conditions of the occurrence or production of things, has its sole use and value in the power it gives us of producing results for the benefit and amelioration of human life and avoiding the evils that inevitably proceed from the want of such knowledge. The purpose of knowledge may thus be succinctly expressed as the gaining of power over things for human needs. It is knowledge alone that can give us this power, but apart from doing so it has neither force nor function.[1]

And not only in its general spirit and motive is Hobbes's undertaking akin to Bacon's. The resemblance extends to points of detail. In spite of the wide difference in their doctrines of knowledge, their modes of correlating the sciences are each based on the consideration that in the means of application we have an effective principle of connexion. Indeed the conception of method presented by Bacon and by Hobbes respectively, as expressing the general principles of scientific procedure, is connected in both cases with their affirmation of the practical character of knowledge. They put stress on different aspects of the process, yet the features they respectively emphasize are precisely such as in their view make it fruitful and reliable. Bacon's method is inductive, because he sees in a careful and gradual advance from the concrete contents of experience the only means of attaining results that can be either used or properly tested ; and Hobbes gives prominence to the deductive side of knowledge, as the very process of applying comprehensive principles to the manifold intricacies of life and action.

When Locke raises explicitly the whole question (already underlying the work of Bacon and Hobbes) of the nature and extent of knowledge, it is with a like confidence in the practical significance of all genuine inquiry.

[1] §§ 6, 7.

Whatever doubt there is about the precise scope and import of human knowledge, it at any rate suffices for our practical guidance and can be turned to use in the affairs of life which are our immediate concern.[1] But the critical examination of knowledge implies not merely a doubt about its complete adequacy and certainty, but also and for the same reason a latent problem concerning the relation between theory and practice. For if there is any force in the question as to the competence of knowledge, which nevertheless serves the needs of life, how shall we reconcile theoretic doubt and practical assurance ? Or again, more generally: What is the bearing of the practical reference of knowledge on its character and its relation to reality ? These questions have presented themselves in one form or another all through the successive stages in the development of English philosophy.

We found that Locke's account of knowledge presents a conflict between two views of ideas—as materials and as processes of knowledge. He begins by distinguishing sensation and reflexion as different sources of the material of knowledge, and yet virtually merges the distinction in that between passive reception of the material and active transformation of it into knowledge. Moreover, his opposition of sensations or simple ideas as the originals of knowledge and the operations of the mind in combining and relating them involves dubiety as to whether knowledge resides in the ideas or only in the relating activity exercised upon them. According to his own statement it resides only in the connexion of ideas in a judgment concerning them.[2] But unless ideas are already functions

[1] " The candle that is set up in us shines bright enough for all our purposes " (*Essay*, bk. i, chap. i, § 5). " Our business here is not to know all things, but those which concern our conduct " (§ 6).

[2] " Our ideas are not capable, any of them, of being true or false, till the mind passes some judgment on them ; that is, affirms or denies something of them " (bk. ii, chap. xxxii, § 3 ; *cf.* iv, i, § 2).

of knowledge their relation in a judgment can never reach out beyond the act of judgment itself to any ulterior reality. This is the crux of Locke's theory of knowledge. In view of it he is neither able to get entirely rid of the representative conception of ideas nor to show how they are valid representations of reality. His thought wavers between acceptance and rejection of the assumption that the criterion of knowledge is to be found in the correspondence of ideas with archetypes outside them. Throughout his discussion of the origin and nature of ideas there is a constant strife between the alternatives of determining their character and validity on the supposition that they represent independently existing things, and of seeking a criterion in their own procedure as elements or aspects of judgment.[1]

But further, it is just this discordance between the presuppositions and the immanent results of Locke's philosophy that renders uncertain and problematic the validity of our ideas as expressions of reality. The lingering assumption of an external criterion makes them seem to lack a verification that is required though never forthcoming. In the end Locke reaches the conclusion that certainty attaches only to a very insignificant modicum of our knowledge, consisting either in the immediate apprehension of a relation between ideas or else in reasoning or demonstration through intermediate ideas on the basis of such intuition ; but that in all that goes beyond this intuitive or clearly demonstrative evidence, there is only a varying degree of belief or assent without proof. This vast mass of our judgments Locke characterizes (in distinction from knowledge proper) as

[1] II, xxx, § 2 ; iii, iii, §§ 11, 13 ; etc.—For a detailed and suggestive treatment of this point see A. W. Moore, *The Functional v. the Representational Theories of Knowledge in Locke's Essay* (Chicago University Press).

'the presuming things to be so without perceiving it.' To them belong at most only probability, though this rises towards full assurance with habitual and confirmative experience. Such probability is indeed, in default of indubitable knowledge, serviceable for the conduct of our life and sufficient for all practical concerns, but the judgments or opinions it yields are wanting in theoretic validity.[1]

The divergence of the theoretic certainty and the practical efficacy of knowledge, thus alleged by Locke, gets accentuated in Berkeley, and becomes still more prominent in the philosophy of Hume. Berkeley's fundamental contention is, we saw, that since our sensations or ideas of things are all that enter into our actual experience, the supposition of a material substance underlying or causing these is wholly gratuitous in respect of their import. And since mind, on his view, is the sole agent, both the substance and the causality of things are resolvable into the activity of mind—finite or infinite. But in spite of Berkeley's intention to reconcile philosophy and common sense, or theory and practice, through the identification of ideas as knowing with things as known, his philosophy does not wholly succeed in accomplishing this. Indeed, on the whole, it even tends to prevent a reconciliation. Our ideas, he holds, constitute a natural and universal, yet withal an arbitrary language, whereby are conveyed to us their successions and coincidences as elements in our experience, and the significance these have for the ordering of our affairs ; but they show no reason for their order and connexion.[2] They serve us

[1] IV, xiv-xvi ; xvii, §§ 14-7.

[2] *Principles of Human Knowledge*, § 66 ; *Theory of Vision*, § 147. *Cf. Principles*, § 31 : " That food nourishes, sleep refreshes, and fire warms us ; that to sow in the seed-time is the way to reap in the harvest ; and in general that to obtain such or such ends, such or such

for use and direction but not by way of explanation or insight.[1] Berkeley's doctrine of ideal signature—of ideas as a regulative symbolism instead of a rational comprehension of existence—is thus in its ultimate significance an interpretation of human knowledge as instrumental to practice rather than in any measure explicative of the nature of things. But although valid as against the assumption that our knowledge is capable of affording us a definitive or fully articulated apprehension of reality, and as showing its eminently practical aim and reference, his conception of ideas is defective inasmuch as it involves a sheer contrast between their value for guidance in practice and their incompetence in the way of theory.[2]

The ostensible result of Hume's criticism of knowledge is, as we have seen, to leave ideas as transitory appearances without a hold on any reality, whether mental or material, beyond them. He can find no proof for the statement that they contain a clear and certified reference to anything ulterior to their own transient existence. They are not self-originating or self-explaining, but their existential conditions or implicates lie outside the pale of knowledge; and even their own supposed rational connexions with each other—except in the case of those which do not concern existence at all—are never discoverable by human understanding. But there underlies Hume's sceptical principles a positive, and even potentially constructive, conception of knowledge as being at all events

means are conducive—all this we know, not by discovering any necessary connexion between them, but only by the observation of the settled laws of nature" (*i.e.*, on Berkeley's principles, the habitual course of occurrence of our ideas), "without which we should be all in uncertainty and confusion."

[1] *Alciphron*, dial. vii, §§ 11-5.

[2] The practical tendency exhibited in Berkeley's philosophy is even more pronounced in that of his disciple, Mill. See above, p. 100. *Cf.* C. M. Douglas's *John Stuart Mill*, pp. 110-3, 240 *ff.*

valid for practical purposes and trustworthy within the 'narrow reach' of our understanding and the confines of our actual experience. Like Locke he restricts certainty to intuition (sense-perception and memory—and even these are open to question) and demonstration or self-evident reasoning; and allows only probability to all argument concerning fact or existence. Like him, too, he refuses to regard as knowledge, in the full sense, what does not carry its own complete assurance with it; and contrasts with it belief, which is nothing but a feeling or irresistible instinct, based on habit, that constrains the mind without convincing it.[1] But (Hume always concedes and even urges in conclusion) these 'judgments of belief,'[2] though they are devoid of theoretic justification, are nevertheless such as to have use and validity in practice.

This result has a dual import. On the one hand, it widens the breach between theoretic adequacy and practical value; but on the other it vindicates the place of beliefs and probabilities—the realm of feeling and of custom—as supplying the only means we have of meeting the needs of practical life. Thus, if we reject the supposition that knowledge demands an absolute or final certainty which it can never attain, we have still left to us the function it performs in our life and in the conduct of its affairs. Proof is lacking for much that we habitually regard as certain: but it is by habit, or by feeling, and not by intellectual certitude, that we regulate our actions and conduct our everyday thought. This is the significance (and the explanation) of the perplexing contra-

[1] *Treat. of Human Nature,* bk. i, pt. iii, sects. vii, viii; and Appendix.

[2] The phrase is not Hume's but it expresses his position accurately enough. Comparison with Kant's distinction of 'judgments of perception' from 'judgments of experience' is instructive (see *Prolegomena,* § 18 *ff*).

diction between Hume's scepticism in philosophy and his indifference to its results as soon as he has returned to 'common life.'[1]

We have already considered in its main import the nature of the movement begun in Reid's philosophy in opposition to Locke's principles and their outcome in Hume. At its deepest it may be said to be directed to defending the validity of knowledge by interpreting ideas as judgments or elements in judgment, that is, as functions and not mere passive materials of knowledge. But Reid's doctrine is vitiated by the survival of this very antithesis of data and activities of consciousness in his distinction between the facts of experience and the rational principles that give them significance; which is prejudicial to the establishing of any intrinsic objectivity in the ideas themselves. The aim of his thought is to provide a theoretic vindication for the conceptions underlying daily action and social intercourse, and thus to justify the principles of common sense. He is only able, however, to point to 'irresistible belief'[2] belonging to the 'constitution' of the mind in support of their claim.[3] Reid's philosophy, in fact, not only does not answer Hume, but for the most part restates Hume's problem as

[1] *Treatise*, bk. i, pt. iv, sect. vii; *Enquiry*, sect. xii.—When Hume proclaims that "Custom is the great guide of human life" (*Enquiry*, sect. v, ed. Selby-Bigge, p. 44), he is echoing the principle which had already formed the basis of the whole argument of Bishop Butler's *Analogy of Religion*—"Probability is the very guide of life." In considering the nature and course of English philosophy, it is scarcely possible to overrate the importance of Butler's contribution, not only in the special fields of ethics and theology, but also as regards the principles of method and the general philosophic development. His attitude and procedure—and only in a less degree his results (in their general character at all events)—have a peculiar interest and significance for our problems of the present time. See especially the introduction and the conclusions to the two parts of the *Analogy*; and pt. i, chap. vii.

[2] Which is, after all, precisely what Hume found.

[3] *Works*, vol. i, p. 110.

though it were the solution. Hume shows the difficulties of knowledge in spite of practice ; Reid urges in reply the strength of practical beliefs. When we come to Hamilton the full issue confronts us.

Although Hamilton's philosophy is in its initial features only or mainly a continuation and elaboration of Reid's position, we found him developing in the course of his reasoning a doctrine that brings to a head the opposition between knowledge and belief, theory and practice. The general significance of this doctrine, which is only outlined by Hamilton,[1] is that the true nature of reality is incomprehensible, and that our ideas are only symbols, which are wholly inadequate in point of knowledge while yet competent as the media of beliefs accommodated to the sphere of practice. All our knowledge, so far at least as it claims to be finally valid, is thus declared to be regulative or practical and not constitutive or explicative in its character,[2] or to have theoretic significance only through its intimation that there is an ulterior reality above and beyond the limits of human thought. Our ideas, in short, serve in the end only for practical purposes, or express beliefs whereby to guide our actions and shape our conduct, but lack such validity as would justify our taking them as applicable to reality.

[1] *Discussions*, p. 15. More fully expounded by Dean Mansel, *Limits of Religious Thought* (lects. iv, v). Spencer's modification of the doctrine (*cf.* above, Chapter VI, p. 121) avoids acceptance of the distinction here in question.

[2] "The highest principles of thought and action to which we can attain are *regulative*, not *speculative :* they do not serve to satisfy the reason, but to guide the conduct : they do not tell us what things are in themselves, but how we must conduct ourselves in relation to them" (Mansel, *Limits*, etc., 5th ed., p. 100).—The influence of Kant's philosophy is here obvious. A recent statement which, while expressly rejecting the conception of sheer unknowability, is otherwise in line with Hamilton's and Mansel's doctrine, is that of S. H. Hodgson, *Metaphysic of Experience*, vol. iv, pp. 204 *ff* (*cf.* below, p. 209).

We have seen that the conception of reality as essentially impervious to knowledge—or of knowledge as inherently incapable of apprehending reality—is untenable ; and that the doctrine of unknowability is warranted only as signifying that our definite ideas have always a limiting background of indefinite consciousness or feeling, which at once renders complete knowledge unattainable and points the way to further attainment. Such inchoate knowledge may be called belief, both to differentiate it from the ' clear and distinct ideas ' which are the traditional mark of knowledge proper, and as meaning that it affords a conception of reality which is significant for life and action in advance of fuller apprehension. But the truth is misconstrued when this is taken to imply any radical separation of the spheres of knowledge and practice.

The common defect of all the doctrines—from Locke onwards—which make this separation between thought and action, is that of recognizing only definite knowledge and consequently distinguishing abruptly from it whatever is vague or conjectural in our consciousness of reality.[1] This is seen, for example, in Locke's and again in Hume's criterion of certainty, and even in their criticisms of the ideas of substance and causality ;[2] as well as in the subsequent relegation to another sphere, in the form of belief, of all that does not possess full theoretic evidence. But the underlying trend of the

[1] *Cf.* James, *Principles of Psychology*, in the chapter previously cited (p. 152), for the correction of this deficiency ; and the passages already quoted from Spencer (pp. 121, 152). See also Bergson's *Evolution créatrice* (especially pp. 191-3, 210-1, 289-90), where the principle that definite thought has a ' fringe ' or ' penumbra ' of feeling or intuition is viewed as the means of reconciling the opposition between intelligence and instinct.

[2] *Cf.* the chapters in N. Smith's *Studies in the Cartesian Philosophy* (ch. v and vi) on the inheritance of conceptualist principles from Descartes in the thought of Locke and his successors.

entire movement of English philosophy is towards allowing to the suggestions of feeling and to the import of practical beliefs their due place in our theories and interpretations. What then is the meaning of the principle that verified and verifiable knowledge has always a practical significance ?

Let us recall, in the first instance, the point at which we left the problem of experience and reality in the last chapter. Reality, we found, is one with experience ; yet knowledge—the reflective interpretation of experience—is never wholly adequate to the task of expressing the nature of reality as it presents itself in our immediate consciousness. There is always an element of discrepancy between our knowledge and the reality which it seeks to know. Not that it is not genuine knowledge, or a knowledge of genuine reality. All our knowledge is indeed appearance—all we know are phenomena : but phenomena are the very stuff and nature of a knowledge of reality. Nevertheless reality always transcends knowledge ; knowledge never succeeds in grasping it whole and entire. This is the position which Bradley maintains in opposition alike to an agnosticism such as Spencer's and to unduly gnostic tenets such as we found implied in Green's doctrine.

Knowledge, as Bradley shows, becomes definite only at the expense of becoming in some measure general and symbolic. It is a process in which more or less abstract symbols get substituted for the concreteness of immediate experience. Thus all our knowledge is not only incomplete, but is inevitably, though in varying degrees, fragmentary and incoherent ; yet this is not due to any flaw in the inherent nature of knowledge which might conceivably be otherwise, it is rather the necessary accompaniment and evidence of its being ' something less than

reality.'[1] Our actual knowledge, therefore, is never either entirely true or entirely false. As a feature or suggestion of immediate experience, having its own inexpugnable place in, or as a qualification of, reality, every item of knowledge has more or less of truth ; but as measured by its own standard of completeness, it is always in some degree false. All that can be claimed for our ideas and judgments is that they have greater or less validity, but not that they are wholly true. They have as their complement a background which is at least relatively unknown ; and this indefinite and illimitable *beyond* of unknown conditions makes it impossible that any of them should be definitively or finally valid expressions of reality.[2]

Bradley holds, accordingly, that much that for practical purposes can be taken as if it were fully true, must from the theoretical standpoint be recognized to have in it somewhat also of the nature of error. So long as an idea fulfils its purpose of rendering some portion or aspect of our experience in any measure comprehensible and significant, and is not ousted by another idea which fulfils this purpose better, it may be regarded as true unconditionally, although it can have no more than a relative worth ; and may even be accepted as valid within its own sphere and in the relation to its special purpose, in spite of all discrepancy and inconsistency. What is theoretically unjustifiable may thus be useful and even necessary in practice ; although this does not imply a radical and intrinsically insurmountable diversity between the spheres of knowledge and action, but is incidental to the incomplete and tentative nature of our individual experience.

[1] *Appearance and Reality*, chap. xv, pp. 162-7 ; *cf. Principles of Logic*, especially bk. iii, pt. ii, chap. iv.

[2] *Appearance and Reality*, chap. xxiv, pp. 360-82 ; *cf.* pp. 539-47.

In view of this perpetual frustration and infinality in our quest for truth, and the consequent incessant divergence of the ideal of completed theory from the needs and problems of practical life—in spite, moreover, of the assurance of an underlying unity of knowledge and practice—there is clearly desiderate some mode of establishing an eirenicon and granting actual theoretic validity to ideas that fall short of ultimate truth.

In this interest the doctrine has been propounded and has gained much currency that theoretic validity has no other significance than practical value—that truth means instrumentality to practice. Knowledge, it is maintained, is not only essentially related to action but wholly subordinate to it. Action is primary ; knowledge is subsidiary, and only an instrument of action. Or again, more fully : Experience is throughout active and purposive, the endeavour to realize some aim or to satisfy some want ; and knowledge arises only in the effort, as part and parcel of this purpose, to ascertain means for the attainment of the desired end. The actual meaning of any idea or judgment is the action to which it leads ; and it is true just in proportion as it guides to results which accord with the desired or anticipated experience. Thus the test of the validity of our ideas is the actual experience of their consequences—of the practical outcome of our believing them.[1]

In so far as this view is put forward as a refutation and not simply a modification of the doctrines against which it is directed, it throws itself open to the criticism that it is only on presupposition of the general validity of the controverted conclusions that its method and principles can be reasonably upheld at all. The pragmatist

[1] W. James, *Pragmatism*, especially lect. vi ; F. C. S. Schiller, *Humanism*, chap. iii ; *Studies in Humanism*, chap. vii ; J. Dewey (editor), *Studies in Logical Theory*.

principle does not invalidate previous results—it is rather based upon them.[1] But as a highly significant means of supplementing and reinterpreting preceding conceptions, and as constituting an important line of advance both with regard to procedure and results, it heralds a further stage in the development of English philosophy.

The assertion of the absolute priority of practice would seem to be an equally one-sided reaction against assumption of the pre-eminence and independence of knowledge. But it is important and indeed invaluable as a protest against any self-sufficient intellectualism—as a plea for recognition of the due rights of the active and volitional side of our nature even in the sphere of theory ; and it is justified in demanding a restatement of the character and even of the problem of knowledge, which shall take account of the intrinsic connexion of theory and practice in the economy of experience. This need not imply that action, in contradistinction to knowledge, is to be regarded as either the primordial or the dominant feature in our experience : as we shall see immediately, neither is by itself sufficient to constitute any concrete instance of it. But it implies that they have a conjoint import in our progressive consciousness of reality ; and that the significance of knowledge or theory is as much dependent on its reference to action as the worth of conduct or practice is due to its illumination by knowledge. What concerns us here is the sort of modification which this conception introduces into the previous theories of knowledge and of reality.

[1] The general conception of reality posited by what is termed the absolutist philosophy—that of an infinite experience, in which all finite beings in varying degrees and in diverse characters participate, and the presence of which (however dimly felt or inadequately appreciated) is the ultimate source of ideals and provides our ultimate standard of values—is a postulate that seems required for the proper working of the pragmatic criterion of knowledge.

Knowledge and will are complementary and equally indispensable aspects of consciousness. Knowledge always involves an act of attention, which depends on some interest or expresses some attitude. Again, will invariably involves some awareness of fact which defines a situation and suggests a goal. Even a cursory observation, for example, implies a susceptibility to further impression or an incipient course of inquiry; and even an impulse to act implies apprehension of an environment and a suggestion of change. Any actual process of consciousness is thus a specific mode of awareness that is at once the expression of, and itself gets expression in, a more or less determinate purpose or an overt act.[1] It does not seem anywise possible, therefore, to suppress either the cognitive or the volitional aspect of experience, but only to seek for some way of relating them.

The active or conative—or what may perhaps in general be called the teleological—character of knowledge signifies, in the first instance, that it is always in some measure selective of its own content, and that it is in its actual functioning both retrospective of previous experience and prospective of subsequent experience.[2] In perception, for example, there is not simply the presentation of certain details, and thereby or therein the representation of certain other details which are recalled through association, yielding a total or unitary consciousness that is essentially a complex of passively received elements. The process consists rather in the suggestion of a scheme or form of relation which functions, under the influence

[1] *Cf.* J. Royce, *The World and the Individual*, vol. i, lect. i, § 4; vol. ii, lect. i, § 5.

[2] This conception of knowledge is stated with much force and suggestiveness by Professor Stout, whose writings contain at once the most convincing and the most moderate expression of the volitional aspect of consciousness.

of interest and attention, in determining (in greater or less degree) exactly in what way or to what extent the further detail shall be actualized in consciousness.[1] Similarly, a scientific concept is essentially a 'plan of action' for the investigation of phenomena; it is a principle or a formula which we propose to adopt and apply in order to see how it works as an explanation of factual details. It is in this way directive of the special line of inquiry that is followed, and is in turn held as verifiable, and indeed itself fully interpretable, only through its detailed application to the object-matter it is used to interpret. This symbolic and constructive tendency is a feature of all consciousness. The simplest case of perception is apperceptive in its character, and is in its own way a matter of hypothesis and experiment just as much as any of the more advanced and complex forms of knowledge. In like manner the very conception of a law, or of a system of nature, has a teleological character. Such a concept is a postulate without which knowledge would be impossible, rather than the expression of a result of knowledge—an instrument, not simply an outcome, of the interpretation of reality.[2]

Again, any definite course of action presupposes belief, and therefore acceptance of an idea or set of ideas as indicating a certain state of being and a way to its attainment, in advance of actual experience; and so far at least as this action and its result are concerned the value of the idea is estimated by the consequences of accepting it. As a belief any such idea (or ideal) is measured by its efficacy in determining action; as an interpretation of reality it is confirmed or discredited according as its

[1] *Analytic Psychology*, bk. ii, chap. v, especially § 5 (vol. ii, pp. 18-29); *cf.* ch. viii, and see also *Manual of Psychology*, bk. iii, div. i, ch. i.

[2] *Cf.* J. Ward, *Naturalism and Agnosticism*, vol. ii, lects. xviii and xix.

outcome is found to be compatible or incompatible with its own suggestion. Apart from the influence of beliefs knowledge and action would be equally stationary.[1] Conversely, an idea tends always to issue sooner or later in activity of one sort or another. Every item of knowledge is thus not only a more or less definite apprehension of reality as already experienced, but also an anticipation of further experience. Ideas, one may say generally, are symbols, not as failing to yield a genuine knowledge of reality or as being only serviceable for practice, but as serving to express some actual moment or phase of experience and guiding towards fuller actualization of what is, or seems to be, involved in its existence and meaning.

But further, while knowledge and action are thus correlative to each other, neither of them is intelligible without reference to a basis of immediate feeling, which prompts to endeavour by giving some hint of a reality that is capable of yielding further and ampler experience. We have seen that on the side of knowledge experience always involves a relatively indeterminate and a relatively determinate feature or aspect, and that the transition from indistinctness to distinctness of consciousness is accomplished through an act of notice or attention whereby the character and significance of our experience are more or less definitely recognized. Such recognition (as the general form or character of apprehension) has necessarily in it somewhat of that individual interest and selection which are the root of will. It signifies, moreover, the presence of a reality which inspires to its own living realization in our conscious experience. Similarly,

[1] On the place of belief in knowledge, and the implied relation to action, *cf.* James's essay on *The Will to Believe.* See also Campbell Fraser's *Philosophy of Theism,* 2nd series, lects. i-v (*cf.* Pringle-Pattison's *Man's Place in the Cosmos,* 2nd ed., pp. 222-3).

will involves an impulse towards fuller experience arising out of a feeling of there being further reality beyond actual achievement. It is a tendency expressing an aptitude that is not fulfilled but seeks fulfilment, and implying at least a suggestion of the possibility of reaching it ; since an end can be realized only by our believing that the nature of reality is such as to permit or even to require it. If feeling, then, is the source of the suggestion of ideas or knowledge, it is equally the source of the inspiration of purposes or volitions. Thus it may be said that will is related to knowledge as the process of attaining to a state or stage of attainment, and signifies the essentially tendential and progressive nature of our experience. And the very function of knowledge as the definition of immediacy would thus be to guide the instinctive efforts towards fuller experience. Without the aspect of endeavour there would be no movement or process ; without that of ideation or thought there would be no direction or definite trend.[1]

That knowledge is essentially related to practice does not mean, then, any mere subservience of thought to action, of idea to purpose, as though a purpose or an activity could have any determinate being apart from knowledge. But it does imply that the two are bound together inseparably by ties of origin and of goal, and have no existence except as complementary factors in a progressive experience. Whatever answer—both as

[1] For discussion of the relations between knowledge, will, and feeling, *cf.* Bradley, *Appearance and Reality*, chap. xxvi, pp. 458-85; J. E. McTaggart, *Studies in Hegelian Cosmology*, chap. ix ; and A. E. Taylor, *Elements of Metaphysics*, bk. ii, chap. i, and bk. iv, chap. vi. —A recent statement emphasizing the immediate or 'alogical' element in experience, and connecting this in a suggestive way with the principle of infinality, is that of E. B. Bax, *The Roots of Reality*. On this point see also Höffding's little volume, *The Problems of Philosophy*.—*Cf.* below, pp. 210-11, 218-9.

regards general outlook and significance in detail—is ultimately given to the problem of the relation between them, and of each in turn to that elusive but supremely mportant region of feeling or sentience—or further depths of immediacy—from which they emerge and to which they return, it is certain that every special problem, and equally the general problem of existence, is affected by the intimate correlation and interdependence of these various elements in our experience. Any stage of experience is defined both by that from which it proceeds and that to which it tends ; and any valid interpretation of reality depends on the nature of that already accomplished apprehension of or participation in it which we call the actual, and of the beliefs, the ideals and aspirations, which are the foreshadowment and potency of further actuality.

As a principle of method the relativity of knowledge to practice involves an accentuation and expansion of the conception that knowledge advances through the verification of suggestions and hypothetical assumptions by further experience. The general procedure of scientific knowledge requires provisional or suppositional theories which are tested experimentally by their application, or through their own implied consequences. And the pragmatic conception of knowledge amplifies this by showing that in life generally ideas and beliefs are similarly corroborated or else corrected through experience of the actual results that follow from their acceptance. To this principle philosophical constructions as to the nature of reality are no exception : they are tested, as we shall see in our concluding chapter, by the further activity of the special sciences in accordance with the suggestions which they contain. Every fully established doctrine, or properly acceptable truth, is thus one that has been, in the

first place, suggested by our experience as an interpretation of reality as present therein, and in the next place, acted upon in one way or another as a clue to further experience, and evidenced by the congruity of this with the nature of the reality conjectured and sought in the process. And already accepted truth is supplemented and modified by a like procedure. Hence, even although an idea can never be completely adequate in the sense of fully expressing the nature of our experience at any instant, or its nature as a whole, yet its own immediate use is served if it conducts to an experience which is recognizable as in any way or degree an advance ; and precisely in so far as it has its anticipation of experience confirmed in its result it is shown to be adequate within the limits of the function it performs. That no idea is ever wholly adequate means that the suggestiveness of experience is inexhaustible, and that there is no end to the progressive manifestation of reality through and in it.

In its significance for the characterization of reality this conception involves a fresh and vivid emphasis on the infinity of its being and nature, and the consequent infinality of all finite experience of it. This point we shall have occasion to refer to more particularly in the next chapter. Meanwhile we must notice that it is this infinite character of reality, in virtue of which it is transcendent to as well as immanent in our experience, that makes every form of knowledge (and equally every determinate purpose) an inadequate expression of it ; and yet that it would have no existence or meaning for us, if it were not itself the source of the feelings and beliefs that inspire to articulate knowledge and enlightened volition. If all definite knowledge is abstract and all particular volition limited, it is, as we shall see, because these and every particular content of consciousness are only our

changing and laboriously advancing symbols of the infinite reality that is ever more fully manifested in our experience with their progress.

We may conclude, therefore, from the above discussion that knowledge is regulative or practical—not in the sense that it is not at the same time in any degree constitutive or explicative, but as engaged in the endless task of guiding life and furthering experience ; that the reference of knowledge to action signifies that, as being or existence generally must, in order to be known or knowable, be conformable to the nature of knowledge, and indeed constitute the very fulfilment of it, it must have a like relation to will and interest ; and that ideas express reality only by being themselves forces or functions in our advancing experience of what is at once truly infinite and actually present in and to all finitude.

CHAPTER IX

EXPERIENCE AS APPRECIATION OF REALITY

In preceding chapters we have followed the development of English philosophy under certain distinct though closely allied aspects. The stages in the development have been, in the first instance, onward steps both with regard to the procedure of knowledge and the interpretation of experience, as forming the means and the source of any doctrine as to the nature of reality. But as the correlate of this advance there has been a gradual recognition, on the one hand, of a certain community between our experience and reality, and on the other hand, of an infinity in the character of being and in the modes of existence which involves actual infinality in every determinate mode of apprehension and every determinate goal of conduct. We must now ask what modicum of more or less definite outcome the development yields as an expression of the nature of experience and its relation to reality.

The traditional method of English philosophy is, at the present day, expounded most clearly and forcibly, and accepted most unequivocally, in the philosophy of S. H. Hodgson. Indeed it may be said that the only account of the significance of the experiential standpoint in philosophy which has any claim to completeness, and the only thoroughgoing application of this over a wide

range of topics, are contained in his writings.[1] Subsequent systems (or let us rather say, future inquiry) can, therefore, only supplant or modify conclusions such as those he reaches, with a claim to equal philosophic value, by giving experience and the experiential method a still wider meaning and a still larger scope. Meanwhile Hodgson's philosophy is the completest embodiment of the English tradition—even if it be not in all respects the truest expression of its outcome. An account of his doctrine, followed by some points of criticism, will lead to a brief statement of the present position of philosophic inquiry in its relation to the English development.

In Hodgson's view the most fundamental and the most characteristic thing about philosophy is its method. The proper method of philosophy consists in analysis of the content of consciousness or experience without assumptions either as to its origin or its nature.[2] Hodgson explains his conception of genuine philosophic method by contrasting it both with transcendental and empirical

[1] The statement that follows—it could not be made fuller without being out of all proportion to those of previous chapters—is taken entirely from Hodgson's latest and maturest work, the *Metaphysic of Experience;* but the earlier *Philosophy of Reflection* has also been consulted, and a number of papers on various points of method and doctrine have contributed to the formation of a conception of the value, and also of the limitations, of his philosophy.

[2] *Cf.* "All assumptions and postulates must be left behind at the entrance to philosophy" (Hegel, *Logic*, § 78, English translation, 2nd ed., p. 141; *cf.* chap. i).—Wide as seems the difference in procedure as well as in conclusions between Hodgson's philosophy and Hegel's, they present the same ideal of avoiding all presuppositions in the quest of truth. The philosophic ideal of Avenarius (*Philosophie als Denken der Welt*, etc.: *Prolegomena zu einer Kritik der reinen Erfahrung*, especially §§ 51 *ff*, 71 *ff*)—that all interpretation of experience be expressed in terms of experience itself, by the elimination of every element of admixture, *i.e.*, non-experiential hypothesis—is yet another form of this conception. (For an account of the methodologic principle of Avenarius, see A. E. Taylor, *The Problem of Conduct*, pp. 18-26. His doctrinal position, both in its negative and its positive aspects, is stated in *Der Menschliche Weltbegriff*.)

modes of procedure. A transcendental method seeks to explain experience by reference to existence or agency of one sort or another conceived as lying behind or beyond it. Empirical methods take some aspect or conception of fact as their ultimate basis without seeking to penetrate to its source in experience. Both thus use conceptions derived from previous inquiry in a way that makes them presuppositions displacing simple appeal to the evidence of our experience itself. The true method in philosophy, on the contrary, avoids all initial assumptions by inquiring of any accepted fact or alleged principle of explanation, precisely what it is in or for consciousness. Philosophy cannot assume, for instance, the existence of any being or reality independent of consciousness, nor again that all or any existence is dependent on consciousness ; but must allow the distinction between consciousness and existence, and the fact of their dependence or independence, to emerge in the course of the interrogation of consciousness.[1]

It is implied in this conception of philosophic method that all questions of origin or genesis must be preceded by investigation of the nature of experience, or the content of consciousness, which shall inform us concerning the actual character of our experience and that of being in general as known only through this medium. Such an inquiry will disclose, as it proceeds, the meaning of reality, of subjective and objective existence, of agency and origination ; and only then can it be relevant to inquire concerning the conditions of the occurrence of any content of consciousness, or as to what existents are related to each other as respectively conditioning and conditioned.[2]

This philosophic investigation of the content of experience is distinguished both from psychology, and from

[1] *Metaphysic of Experience*, bk. i, chap. i, §§ 1-4.

[2] § 5 ; *cf.* bk. iv, chap. i, §§ 1, 2.

the logical theory or epistemology which abstracts from reality in considering the nature of knowledge. Psychology presupposes the distinction between the process of consciousness and the existents which are the conditions of these processes, or between consciousness as subject and the objects to which these processes refer ; and proceeds to trace the development of consciousness as the experience by or in an individual mind of a particular environment, an experience generated by relations of causality or of interaction holding between the mind and its environment. But from the point of view of philosophy the individual consciousness with its processes and their objects fall along with all other beings and things under the single head of existence, as the inseparable object of consciousness generally. Psychology treats the facts of consciousness in quite the same way as the other special sciences treat their phenomena—as existents which are objective to consciousness in general. But the consciousness which psychology takes, in its relation with other existents, as the special object of inquiry, is for philosophy the subject or subjective aspect of any and every existence of which it has any sort or degree of knowledge. And of consciousness taken simply as a knowing (that is, as dealt with in philosophy) consciousness as an existent (the subject-matter of psychology) is only one object among others.[1] Hence, further, while philosophy treats consciousness or experience in its primary and proper character as the generic nature of all modes of knowing, and in this sense takes knowledge as its peculiar subject-matter, it does not (like much that is designated theory of knowledge) distinguish *ab initio* between consciousness and its object—between the knowing and the known, but inquires precisely what the distinction is, and what it

[1] *Cf.* bk. ii, chap. ii, § 6.

involves as to the general nature of reality as revealed in the nature of our experience.

Beginning thus from the analysis of an actual ' moment of experience '—for example, the hearing of a sound—Hodgson shows that it is always at once a determinate content or quality of experience and a process involving change of or within our experience generally. In the former aspect it is a particular item of consciousness—a definite somewhat experienced ; in the latter it is a specific mode of experiencing, in continuity with others which precede or accompany or follow it. In the experience itself, in its simplest form, these two aspects are not discriminated ; and though distinguishable, they are inseparable and entirely commensurate.[1] Moreover, although any specific process-content of consciousness has these two aspects—a knowing and a known, or the perceiving and the percept—they are not related to each other as subject and object. The content perceived is not the object of the perceiving, but its nature or quality (' whatness ') ; and the process is simply the existence (' thatness ') or occurrence of this in consciousness. They are not strictly even subjective and objective aspects of each other, though they are the ' indispensable experiential basis and foundation ' of the distinction of subject and object. For, so far, the distinction in question could not arise. " Each aspect is distinguishable from the other, but there is nothing to mark them as respectively subjective and objective. Each has equal claims to both titles, since each is commensurate with the whole experience."[2]

But if, or in so far as, the occurrence of a content as a definite item of consciousness is itself the content (or a portion of the content) of a further or total moment of

[1] Bk. i, chap. ii, §§ 1-3. [2] Vol. i, p. 62.

experience, the former is objective to the latter as subjective ; for the occurrence of the former—the fact of its existence—is perceived in or by the latter. This is most readily seen in cases where there is a quite appreciable differentiation of perceived content within a continuous process of perceiving—as, for example, the sequence of two sounds. But every case of perception has more or less of this character. All perception is in fact *reflective* perception. It is a total moment of consciousness in which a distinct content, having arisen out of indistinctness, is apprehended, before receding again altogether into indistinctness, as an actual existence or occurrence in consciousness. This is the character of all experience : its one primary and universal function is that of reflective awareness of its own content.[1]

Thus every mode or item of consciousness is at once knowledge and existence ; and the distinction between these consists in this—that its being a determinate content of awareness involves at the same time its being a particular fact or occurrence in the history of an individual experience. As reflexion advances the distinctions of knowledge and existence, of subject and object, of nature and genesis, become definite conceptions interpretative of experience and opening the way to further interpretation. They yield us, for example, the universal principle that being and knowledge are inseparable aspects of all reality, and the methodological conception of viewing conscious-

[1] " All consciousness, all experience, has in itself a double aspect ; every perception, taken simply by itself, is a process-content, or the awareness of a whatness ; perception in which the reflective character is apparent is the continuation of this process, with the whatness-thatness of its beginning perceived over again as a whole. It is itself also an instance of the very character, namely, doubleness of aspect, which it perceives. Philosophical analysis itself is nothing more than a special mode of reflective perception, and continuous with prior instances of it ; just as reflective perception is continuous with the so-called simple perception which it objectifies " (p. 75).

ness primarily as a knowing, and so as the revealer of all existence whatever, and secondarily as an existent with conditions for its occurrence residing in other existents than itself.

From this starting-point of 'the essential nature of consciousness or experience' Hodgson proceeds to develop, with great fulness of exposition and carefulness of statement, the distinctive principles of his philosophy. The results which he reaches in the course or as the outcome of his investigation may, in their main outlines, be expressed as follows.

In the first place, our conscious experience is the sole evidence we have of the being or the nature of any reality : reality or existence in its primary sense means nothing else than objectivity to consciousness as the knowledge or the thought of it. This inseparability of consciousness and existence, of knowledge and reality, signifies that there can be no reality without consciousness as its counterpart. A reality of which there is no consciousness whatever is a contradiction in terms ; and only by abstraction can we think or speak of it as existing wholly irrespective of our own consciousness at the moment of thinking of it. But although consciousness and existence are thus correlative, this principle is without prejudice to the question whether consciousness is or is not the only existent, or as to what is involved in the fact of consciousness being an existent at all.

Secondly, consciousness is known as an existent inasmuch as any content of consciousness is seen to have a factual aspect as a phase in an order or course of occurrence as well as its evidential aspect as an item of knowledge. And as a process or occurrence consciousness requires conditions for its occurrence ; since each phase of it, as apprehended, is a particular or limited existence, which

therefore implies an existence beyond itself. These conditions cannot explain the nature of consciousness—the peculiar character of quality of its contents ; they account only for its occurring when and where it does occur, by showing what other occurrences must accompany it : that is, not for what consciousness is or ultimately contains, but for the genesis and order of its several modes or states.

But further, this existence can be known distinctively as consciousness only in contradistinction to existence which is not consciousness. And what alone we know as distinguished from consciousness is what we call matter : mind and matter are existents which are known to us only through being distinguished from each other.[1] Hodgson unites these two conceptions—the conditioning of the processes of consciousness and the disparity of consciousness and matter—in the principle that matter is a reality which is not consciousness, but exists independently of it and conditions it. More explicitly : Consciousness is the awareness of matter and the only evidence of its existence and nature ; but matter exists prior to and independently of its being perceived or not perceived by this or that individual consciousness, and it constitutes or contains the sufficient and indispensable conditions of the individual's awareness of it. The next point, then, is to see how this principle is obtained and decisively established.

The experience—such as awareness of a discrepancy between expectation and realization, that is, between an anticipation of sense-experience and the experience that

[1] *Cf.* vol. ii, p. 364: "Matter and consciousness are essentially heterogeneous, the characteristic difference, or specific essence, of consciousness being awareness or sentience, while the absence of this characteristic is essential to matter, from our conception of which, whatever else may be included, we always and at any rate exclude awareness or sentience."

actually supervenes—which initiates the distinction between mind and matter is, Hodgson shows, essentially connected with the awareness of one's own body as the constant object among all the other varying objects of our known world. It is in the moment of perceiving a distinction between items of experience, in their character of contents constituting the known world of existence, and consciousness as belonging to one's own body in separation from others—that is, as constituting along with it an individual existent—that body or matter and mind or consciousness are experienced as contrasted with each other and as independent the one of the other.[1]

Such being the experience that compels the recognition, by the percipient, of matter as a reality contrasted with consciousness, decisive proof of the independent existence of matter is afforded, Hodgson holds, in the impossibility that one and the same process-content of consciousness should belong to two different bodies or organisms. When the question of the independent existence of matter is taken in its ultimate or final form it becomes the question, whether any mode of consciousness is ever wholly coincident, or identical in being, with the reality of which it is a knowledge or awareness. The answer is that this identity of existence in the knowing and the reality known, in the perceiving consciousness and the thing that is perceived, is inconceivable. For the meeting-point of mind and matter must be found to lie in the perceptions of touch or pressure which constitute our awareness of resistance. The primary or essential properties of matter, such as cannot be eliminated from its nature as revealed to us in our experience, are those which are known either *as* or *by* these fundamental tactual perceptions. This gives the question a precise and pointed

[1] Bk. i, chap. vii, §§ 1, 2.

expression. To quote Hodgson's own words : " *As* or *by* those immediate perceptions is the alternative ; that is,— Are the primary properties of matter themselves perceptions, or are they properties of matter which exist independently of perception, and which, when perceived, are its face to face objects ?"[1]

The consideration which yields a decisive answer is, in Hodgson's view, the impossibility of conceiving the same perceptual content, as process of consciousness, to be existent at once in the body which is said to be touched and in that which is said to touch it. Say, it is one's own body that touches and another body that is touched. Then as perception the content must belong to the organism touching ; it cannot therefore, in this character, pertain to the thing touched. And since in the nature of the case the two things must be in contact with each other, so that the touching organism is itself touched, the same consideration applies to it ; the perception which belongs to it in virtue of the contact cannot constitute the being or reality of the organism itself. Hence matter must be held to have an independent existence, prior to and conditioning the perceptions which are the awareness or consciousness of it.[2]

Thus, on the one hand, the nature of matter (that is, its properties or attributes as known) consists in modes or contents of consciousness ;[3] and as regards their

[1] Vol. i, p. 405.

[2] I, viii, § 4.—What this implies, however, is surely not (as Hodgson holds) that the content of consciousness is a 'replica' of facts or qualities existing apart from consciousness, but that it expresses a relation experienced as holding between oneself and another centre of being, neither of which consists wholly of consciousness. And it is only through abstraction that the relation can be conceived as being precisely the same on both sides. *Cf.* below, pp. 203, 208.

[3] " Force, coherence, resistance, occupancy of space, are all terms which have meaning only as expressing modes of consciousness " (vol. iv, p. 307).

character or quality the contents of consciousness cannot be accounted for by reference to anything beyond consciousness. But, on the other hand, the fact of the existence or occurrence of modes of consciousness is not accounted for by the nature of their contents ; it can be accounted for only by reference to that which exists independently of the occurrence of this or that mode of consciousness, and conditions its occurrence—namely matter. In other words, matter is explicable in point of nature, though not in point of origin, or as an existent reality, by reference to the modes of consciousness which are the awareness of it ; while consciousness is explicable in point of origin, or as existent, by reference to matter as conditioning its particular occurrences, but not in point of nature.[1]

Matter, then, is " the complex of real conditions upon which consciousness in all its modes depends for its existence." Although to us in great measure unknown, or not throughout positively and definitely apprehended, it is necessarily conceived as inherently capable of being known and as conditioning the occurrence of specific modes of our knowledge of it. But, being known to us as composite, and so requiring some reality to explain the conjunction of its ultimate constituents, matter is necessarily conceived, further, as itself depending for its existence on ulterior conditions operative in or as unknown and illimitable existence that is not material.[2] Moreover, this unknown region of existence must be conceived as having for its counterpart " a continuation of the known modes of consciousness by or into other modes of consciousness than ours."[3] The universe of reality, accordingly, consists of infinite power or agency which is the

[1] I, 395 ; ii, 329. [2] I, 414-5 ; *cf.* ii, iii, § 1 ; iv, ii, § 3.

[3] In a passage that recalls Green's language, Hodgson speaks of individual conscious beings as " partial realizations " or " partial productions into positively known existence " of modes belonging to the

inseparable and commensurate objective aspect of infinite consciousness as subjective aspect.[1]

The supreme merit of this system of doctrine lies in its forceful inculcation and insistent employment of the experiential method in philosophy. Hodgson expresses the nature of philosophic method by saying that it is inquiry into our experience or consciousness of things, without the assumption that their existence and nature are already known anterior to and irrespectively of the inquiry. The function of philosophy (as distinguished alike from common-sense knowledge and from science) is, instead of assuming the existence of things of which we are conscious, to investigate our consciousness of them. The being or the nature of any existent can be ascertained only by asking—not what it is in itself or apart from consciousness, but what it is known or thought of as being, that is, what is the content of the modes of consciousness by or in which it is known. In other words, experience is the sole index and guarantee of any and every reality. *That* anything is, and *what* it is, can be known to us only by our experiencing it—only as a form or mode of our experience.

On this irrefragable basis Hodgson shows conclusively that a reality conceived as irrelative to our experience is an impossibility and absurdity, and yet that consciousness necessarily involves existence distinguishable, even though inseparable, from it. For, while the character any reality has for us consists in, and in this sense depends on, our consciousness or experience of it, the fact of its existing at all (though known only by this same evidence) does

infinite nature of consciousness; and again of these other modes of consciousness as revealing to us, "supposing them to be made part and parcel of our own human consciousness," existences which "at present lie, as it were, behind an unuplifted veil" (ii, 361, 362).

[1] II, 366-71.

not consist in or depend on the said consciousness. Or, stated the other way about, consciousness presupposes the existence of something which becomes the known object of consciousness, although it is only this consciousness itself as knowing or as subject that testifies aught with regard either to the existence or to the nature of its object.

But both the method and the conclusions of Hodgson's philosophy require modification; and the history of English philosophy at once indicates this need and shows the way of further advance. In especial, his procedure and results have to be supplemented by considerations drawn from the practical reference of knowledge which was the theme of our immediately preceding chapter. We have found that not only has knowledge no being of its own apart from that which it interprets, but it has no character other than that of being an aspect of the wider and fuller nature of experience and a phase or moment in each step of its concrete development. It is this latter truth, and its implications for the interpretation of reality, that Hodgson's doctrine overlooks or at all events inadequately exhibits.

Designating the method of philosophy subjective in contradistinction to the objective method of science, he virtually identifies experience from the first with the subjective as distinct from the objective aspect of reality, and starts from experience as consisting essentially in knowing, thus in effect abstracting it both from doing and from the concrete actuality of being; and he ends by finding all the reality of the universe—all agency or efficiency—in existence which must be conceived as distinct, even if inseparable, from any experience of it.[1]

[1] This result gets somewhat transfigured in the light of Hodgson's theory of practice; but his sharp distinction between knowledge and practice renders reinterpretation impossible. *Cf.* pp. 207-10.

Moreover, he regards experience as comprised of ultimate data which are not themselves in any sense or degree interpretative of reality, but constitute a certain given and immediately apprehended content of consciousness, from which any ulterior reality can be reached only by way of inference, as its external presupposition or pre-condition. And he concludes that, while as regards their nature or quality such ultimate contents of consciousness have no assignable conditions whatever, being themselves the source of our very conception of conditioning, the conditions of their occurrence at a certain time and place lie in a definitely apprehended reality inferred as existing independently of them. Against this form of conception it seems at least necessary to urge, as well-founded doctrine and relevant criticism, (1) that every determinate content of consciousness is a feature or element discriminated out of and referring to an indefinite background of immediacy, which inspires or informs it ; and (2) that such apprehension has no being or significance apart from an impulse or endeavour towards fuller participation in the reality which, however transcendent in its nature, is immanent in our conscious experience. These points have already presented themselves in the course of our inquiry, and they will emerge again as we proceed.

On Hodgson's view materialism and idealism are alike untenable.[1] Materialism—the doctrine that consciousness is caused by, or is the product of, matter—is erroneous ; since it is only the origin or occurrence of modes of consciousness, that is, their existence in individual subjects, and not the nature or ultimate content of these conscious processes, that is conditioned by material processes. Moreover, matter itself depends both in

[1] See the *résumé* of his argument in bk. iv, chap. iv, §§ 1 and 2.

respect of its existence and of its nature on reality that is not material. But idealism—the doctrine that the things (material processes, for instance), of which there is consciousness, are dependent on consciousness for their existence—is equally erroneous; inasmuch as it is not the being or existence of its objects but their nature (what they are known as being) that is contained in, or constituted by, the consciousness of them. The existent, Hodgson insists, means the known or the knowable in the sense that no being or occurrence can be thought of except as the object of some mode of consciousness or another, but not in the sense that the knowlege or consciousness of it ever constitutes its existence. Consciousness itself is known as existent only by virtue of its character as a reflective or self-objectifying process, not as the cause of its own contents.

Hodgson accordingly regards his own realism as including the element of truth in idealist along with that in materialist contentions. Both have a basis in our experience, though they misinterpret it and elevate their aspect of fact into a theory of reality as a whole—the one holding that matter, the other that mind is the only ultimate reality. But while undoubtedly valid as against either of these doctrines, taken as mutually exclusive tenets and as final theories of the universe, his doctrine does full justice to neither of them as partial expressions of the truth, and therefore itself stands in need of modification in conformity with their respective teachings.

Such a realism as Hodgson's is not fully adequate to the truth contained in the idealist position. A more concrete view of experience shows that mental and material existence cannot be opposed in the way his philosophy asserts; and that our consciousness or experience can in the end be opposed to reality only as

signifying a partial and gradual in contrast with an infinite or all-comprehensive experience. His argument proves that consciousness and existence are not coincident with each other, and that things may and do exist independently of the knowledge of them, that is, without their being the definitely known object of this or that consciousness as subject. But it does not prove that matter exists, precisely as it is known, apart from and independently of our knowledge of it, and as a reality totally different from consciousness. Nor does it prove that real existence can mean aught else than the totality of experience, which both controls and enables the progress of the activities, the ideals and attainments, of individual lives.

Hodgson himself maintains that the true nature of things can be conceived only as meaning that which they are to infinite and eternal consciousness.[1] Yet he holds that the existence of matter (' its attributes and processes as they really exist '), in distinction from its nature (what it is known as being), conditions the existence though not the nature of consciousness. But since the nature of existence must either be its partial nature as known to incomplete, or its full nature as known to complete apprehension, the qualities we ascribe to matter as constituting or characterizing existence must express the nature of reality just so far forth as definitely known to us, and can

[1] " The true universe is the real universe as known to omniscience ; and even the conception of things as they truly are can by us be arrived at only through, or by means of, the prior conception of an universal or omniscient consciousness, inadequate as our conception of such a consciousness must necessarily be. For, as we saw at the outset that we could not avoid approaching reality in its lowest terms from the subjective side, that is, by asking, not ambiguously what it is, but definitely what it is known as, so also we now find with regard to reality in its highest terms, the actually existing universe of things, that what it is known as is the only meaning which any statement can have concerning what it is " (vol. iv, p. 355).

be distinguished from its existence only as signifying the partial or fragmentary character of our experience. And the conditions of experience can only be the means or medium of its development. Let us take these points in turn.

According to Hodgson's own theory matter, as we know it, exists apart from our knowing it, only in its essential nature of extension and resistance, or (to take his express definition of matter) as 'adverse and active occupancy of space.' All the other ascribed characters of colour and sound, of taste and odour and temperature, are modes of consciousness and not, in the form in which we apprehend them, qualities pertaining to or constitutive of existence other than consciousness. In virtue of his antithesis between nature and genesis, this duplication of mental and material qualities (in the case of extension and resistance) is held to signify that the existence of these qualities, in or as matter, conditions the occurrence of qualities in consciousness identical with them in point of nature, while not conditioning the nature of these same qualities in or as consciousness. It is (in this as in all cases) only the order of occurrence or specific context of the contents of consciousness, not its nature as consciousness, nor the specific nature of its ultimate qualities, that is accounted for by the existence of matter.[1]

Now it is true that experience (taken in its widest character) cannot be explained, and that the fundamental

[1] *Cf.* i, 419-20, 431-2.—With Hodgson's statement of realism, as expressed in terms of the distinction between content and existence, the reader may find it useful to compare those of Adamson, *Development of Modern Philosophy*, especially vol. i, pt. v; and Hobhouse, *Theory of Knowledge*, pt. iii, chap. iii. Other forms of realist doctrine, based like these on an antithesis of process and content of consciousness, are at the present moment being promulgated in several quarters, and will doubtless culminate in a definite restatement. This is one of the most marked of present tendencies in philosophy.

constituents or aspects of our consciousness cannot be expressed in terms of anything more ultimate than themselves. But although it is only within our experience as a whole, and only on the basis of the distinction and relation of features of or in this whole that explanation of anything can be given in terms of anything else, this would rather involve that explanation (which must in any case be confined to interconnexion of such partial features and aspects of experience) should itself have no sharply dividing lines. To this point we shall have to return presently. But, however this may be, a truer experientialism shows that, while what are called distinctively the essential qualities of matter may express the meeting-point (or indeed the common nature) of consciousness and existence that is other than consciousness, it is a misinterpretation to suppose there is warrant in the authentic facts of our experience for maintaining that any content or quality of consciousness simply repeats (or, in Hodgson's language, is a replica of) a quality which is existent in reality apart from such consciousness. The distinction of content and existence as correlative aspects of experience is indisputable ; and likewise the principle that without a consciousness of reality as existing beyond the limits of any and every definite content—any and every definite apprehension of its nature—the distinction between consciousness and ulterior existence could not arise. Not so, however, the conception of matter as a real existence heterogeneous from consciousness ; nor the view that any quality has one existence as an attribute of matter and also another and a different existence as a content of consciousness.

What we call matter resolves itself, on Hodgson's own showing, into otherness to consciousness, together with motion or force as manifest in diverse centres of being. Its

being known to exist, as it is known, independently of the knowledge of it, reduces to the apprehension of it as consisting in partially unknown centres of motion or force, which as such are at least relatively independent of one another. Thus, although it is true that consciousness cannot be distinguished as consciousness except in contrast with what is not consciousness, and that it cannot be distinguished as our individual consciousness except in contrast with other individual consciousness; these requirements are fulfilled in the experience of reality as going beyond our actual consciousness of it and as existing in diverse centres, one of which is distinctively our own. We characterize experience as consciousness in contradistinction to what is not consciousness—not by inferring from its contents the existence of matter as a reality wholly disparate from consciousness, but by apprehending a disparity between our consciousness and reality that is not our consciousness and yet is, as experienced, continuous with it in being and in nature. And we characterize consciousness as ours by apprehending the diversity of our own and other centres of experience. All we are justified in asserting accordingly is, that reality exists in individual centres and that the being of such centres (including our own) is not exhausted in our consciousness of them; but not that reality exists, as we know it,[1] independently of our consciousness of it, nor that it exists otherwise than in some form of experience or another. Since force and resistance are actually modes of our consciousness, and since it is only as actively related to our own being that any other being is contradistinguished to ourselves, we are rather compelled to say that it must have some form of experience which recipro-

[1] The true statement is that any reality exists, not as it is known, but *so that it is known as it is known*, independently of its being known.

cates or corresponds in some way to our own. Not only must all existence be the object of some consciousness as subject, and the object of our own consciousness in so far as we think of it at all ; but further, anything can have existence for us only in so far as it in some fashion affects and is capable of being affected by us, and our consciousness of it can only be an aspect or element in an experience which we share with it.[1]

Turning now to the opposition of nature and genesis, we find that Hodgson considers this distinction to afford the solution of the difficulties that result from assuming the material world to be at once the originating cause and the apprehended object of consciousness. Matter, he holds, conditions the genesis of consciousness—that is, its existence in individual beings, or its occurrence at such and such a time and place—although the nature of consciousness is independent of this or any other sort of condition, and is the sole evidence of the existence and nature of matter. But if the nature and the existence of anything are distinguishable only as abstract aspects of its concrete reality, it would seem rather that whatever conditions the one must also condition the other. The contrary view is tenable only on the supposition that the nature or quality of any content of experience is one thing, and its genesis or temporal and spatial relations quite another thing. Since, however, time and space[2] ultimately belong, equally with all other distinguishable elements of quality,

[1] For the interpretation of nature in accordance with the significance of feeling and interest, *cf.* Ward, *Naturalism and Agnosticism*, especially vol. ii, lects. xv, xix ; Royce, *The World and the Individual*, vol. ii, lects. iv, v ; and A. E. Taylor, *Elements of Metaphysics*, bk. iii, chap. ii.

[2] Hodgson adopts Kant's mode of expression and calls time and space the 'form' in contradistinction to other aspects of content as the 'matter' of consciousness, using this language in its only legitimate sense as signifying that time and space are the most general and constant features of our consciousness.

to the nature or content of experience, the genesis and the nature of anything cannot be thus completely severed. The distinction—like the kindred conception of reality as existing in infinite time and space—must express that very contrast between the partial and gradual character of our experience and the infinite reality, which is involved in any antithesis between content of consciousness and real existence. It is true that the nature or content of consciousness is our only clue to its origin, and that consequently the question of genesis must be subordinated to that of nature and not allowed to dominate it, much less to answer it in advance. This gives the principle of method that the physical and physiological conditioning of consciousness derives its whole meaning from the analysis of experience—that the significance of its 'explanation' is defined by the analysis; and that the psychological account of consciousness has a corresponding limitation. But content and existence of consciousness cannot in the end be separately explicable. Indeed, on the conception that the contents of consciousness have no existence except as factors in a developing experience, the problem of origin tends to merge in that of nature; for any determinate content arises out of experience only as a discriminated and in some degree interpretative element, and its reference to reality is the very process of conducting to further experience.

But further, if there is truth in what has been said above, it is not matter as an existent with a nature fundamentally different from that of consciousness, but matter as expressing or symbolizing in consciousness the reality which is of kindred stuff with it, that conditions the existence of consciousness. The conditions of experience can be definitely assigned in terms of the symbol, although the full nature of the reality is unknown. That matter

has the character of otherness to consciousness and at the same time has its nature revealed only in or as consciousness, becomes intelligible only in this way. Hence materialism is so far justified—that in the sense in which matter contains or signifies the conditions of the occurrence of consciousness, it likewise conditions its nature; although the conditions are continuous with and akin to itself. But idealism, though not warranted in asserting that consciousness is the sole substance and agency of the universe, is right in its insistence on the principle that reality is essentially experience, and that 'what it is known or thought of as being' not only consists of consciousness, but constitutes in every instance an intrinsic feature or a determining factor of its existence—in general, is that character of reality in which it becomes progressively actualized in finite centres of experience.

Hodgson characterizes reality as agency or efficiency, signifying thereby its nature as conditioning or constraining our experience of it. Of this reality matter is held to form a part, and to be the proximate condition of the existence of the finite consciousness of it; while the efficiency of matter is in turn conditioned by that of supra-material reality. What agency there is in the individual conscious being is taken as pertaining solely to the body or organism in distinction from the concomitant consciousness. Consciousness, on the contrary, is considered to be wholly inactive, determined by or depending on material facts and processes but having no influence upon them. But it is only by abstraction or as a methodological device that we can regard this agency as solely resident in matter. Consciousness has at least an equal claim with matter to be regarded as active and efficient. It supplies or expresses an indispensable feature in the order of conditioning, or course of

the occurrence of events. Even if it is true that mind or consciousness, too, is only a fragment and a symbol of what the reality of our experience verily is, it is nevertheless true that reality is actualized only in striving, energizing individual centres of being ; and that all change or process of experience has in its conditioning an aspect of individual functioning which cannot be resolved into any kind of phenomenality—which has in it a certain ultimate or absolute significance.

The validity of some such conclusion as this is indicated most forcibly by a consideration of the conative or purposive character of consciousness. Consciousness is teleological or prospective as well as reflective or retrospective. Hodgson holds that it is in the consciousness of a divergence between expectation and actualization that the distinction between our experience and an independent reality has its origin. Yet he interprets our experience generally as though it were essentially inactive, consisting simply in awareness of the conditions operative in producing it and of its own inert processes.[1] The initial defect of his philosophy lies in equating conscious experience with mere awareness of existence, apart from its relation to any inner movement or impulse towards fuller reality. Hodgson rightly discards the assumption of an immaterial agent in the shape of a mind or consciousness distinct from and having a causal relation to its own states. But his doctrine that the

[1] One of the most pressing of the problems of philosophy at the present time is that of mediating between this conception of consciousness as inert awareness of existence and the conception that it, in some measure at least, creates its own contents (see *e.g.* Schiller's *Studies in Humanism*, ch. xix, and James's *Pragmatism*, pp. 251-7). The view that consciousness is activity, and that this activity just consists in the becoming aware of independently existing reality, is significant and suggestive, but does not meet all the requirements.

material organism is the agent of consciousness—even when combined with his conception of modes of consciousness beyond and continuous with our own—is inadequate unless transformed into a doctrine which is more consonant with the principle that our experience is quite as essentially will or action as knowledge, and which also has regard to the region of indefinite feeling that is the very life and inspiration of every definite item of consciousness. What the whole nature of our experience seems to warrant is the conception, that the agency or energy at work in our consciousness is resident in a reality which is deeper and more intimate than our actual consciousness and constitutes its true being.[1] This reality—which should perhaps be designated not our sub-conscious, but rather our supra-conscious life—is expressed more fully in our organism than in our consciousness. The body or organism, in distinction from the mind or consciousness, means in the actual life-process of the individual those dispositions and habits and impulses, with their legacy from the past and potentiality for the future, which form the basis for present effort—the stuff or material of which our life is to be shaped, expressive at once of our limitations and our opportunities. But although matter thus signifies in our experience the conditions on which consciousness depends, it is as constituting its higher nature in disguise. And consciousness in every phase and changing process reacts upon and modifies its material conditions. The interaction between our own and other bodies, which conditions consciousness, must be interpreted as symbolic

[1] For a statement—in its general form akin to Hodgson's doctrine—of the conception that matter is phenomenal to consciousness, and consciousness an activity of the reality represented or expressed in matter, *cf.* Carveth Read, *Metaphysics of Nature*, chap. viii, § 8; chap. x, § 6; chap. xi, § 8.

of the interrelations—the mutual influences and responses —of such individual centres of life. In whatever way different conscious selves are related to one another, and to the inner being of what we are wont to symbolize only as material forces, it holds true that reality is one infinitely diversified and individuated experience.

When he passes to the consideration of action and volition, Hodgson finds involved in our experience the conception of the *nature* of the 'unseen world' or unknown region of reality — the *existence* of which has already been proved as an implicate of knowledge— as 'a world of existent consciousness,' wherein our ideals and aspirations[1] are realized.[2] But he regards this conception as solely practical and incapable of affording us any speculative or theoretical insight concerning reality, such as is implied in knowledge proper : it is a practical conviction or moral belief having a wholly different province and purport than knowledge.[3] We have seen

[1] Not as expressed in any definitely preconceived end, but as involving an endless vista of progress in conduct and character.

[2] See *Metaphysic of Experience*, bk.iv, chap. iii, §§ 2, 3.

[3] "The real existence of an unseen, infinite, and eternal world, as the real condition of the seen world, is proved by speculative reasoning ; and then (its real existence being presupposed) the nature of that world, that is, the content of its infinity and eternity, namely, consciousness existing in ever increasing harmony, and possibly in modes of which we can now form no positive idea, modes which may be new both in respect of form and in respect of content, is the object of a conception necessarily involved in practical reasoning." "The one conception is reached by way of conscious thought, the other by way of conscious action" (p. 338). *Cf.* above, Chapter VIII, p. 172.— One further excerpt will show the bearing of this position on the specifically religious aspect of the question : "In a philosophy founded simply on analysis of experience, there is no room for pantheism, since it is only as different from ourselves and the seen world that the divine power is known to us ; nor for gnosticism, since we have no speculative knowledge whatever of the unseen world, or the existents therein ; nor for agnosticism, since we have and cannot but have a practical knowledge of the divine power" (p. 402). With some such modification as that suggested by our whole survey of English philosophy, this could be accepted as entirely valid doctrine.

that such a severance of knowledge and action is not warrantable. It becomes impossible if we refuse at the outset to abstract from the active or practical character of experience, and to assume that knowledge has ever only a representational significance. For it must be substituted some conception which shall exhibit knowledge and will as only partial aspects of our experience and complementary phases in its progress.

This is the main desideratum at the present juncture in the history of philosophy. Only on the basis of some reconciliation between intellectualist and voluntarist positions does it seem that any advance can be made towards the further reconciliation of the conflicting assertions of idealism and realism. It seems certain, moreover, that neither issue is to be settled entirely in favour of one side. Neither knowledge nor will is reducible to the other, even if they can to a large extent be expressed in terms of each other. And the claims of mind and matter, consciousness and existence, require a like adjustment.

We have already seen that the basis on which any correlation of the distinctive characters and functions of knowledge and will must be effected, lies in their having a common root in feeling or immediacy of experience. It is here that we get the unity or indifferentiation of knowledge and will, which alone furnishes a standpoint for interpreting their difference and their interconnexion. Feeling, taken by itself, is doubtless as abstract as knowledge or will : no actual experience is ever only immediate. But the immediacy—which is unique in every concrete instant—is the point of departure and of return for the twofold function of suggestion and verification, or theory and practice, which conducts to further instances of it. It expresses the

basis that is immanent in and undergoes transformation through every change or process of consciousness. Whatever difficulties lie in the way of formulating an adequate doctrine on this foundation, the principle itself is indefeasible.

The union of knowledge and will—the representational and the functional aspects of experience—in a continuous reinterpretation and re-formation of immediacy, as the vehicle and the token of our participation in reality, may be expressed generally by saying that experience consists in the *appreciation* of reality. Knowledge never consists in merely reflecting already existent being; nor does action ever create what is nowise existent: but each is a factor or moment in a progressive appreciation of what reality truly *is*. Our life generally consists in getting to appreciate, actively and emotionally, the true nature and significance—the endeavours and motives and purposes, the unique individuality and the essential unity—of our own selves and other centres of experience. And all finite experience, in whatever individual centre it is resident, can only be a process of appreciating ever more fully the nature of the infinite reality. Indeed we can go further, and say that reality itself has this same character. For progress in experience—advancing participation in reality—is essentially development of sympathy, or of entrance into the feelings and activities of others, so as to share in their experience and to acknowledge in growing degree their community with, yet difference from, ourselves. And the infinite experience must be characterized as boundless sympathy—appreciation of the several aims and interests, the particular struggles and limitations, the peculiar worth and significance, of all individual lives.

Experience, then—*our* experience—is reality; and yet

reality can become ours only as we realize it in our experience. The nature of our consciousness shows that it belongs to an infinitely larger and greater whole. *How* infinite in the endless degrees and endless variety of the modes and aspects of its being, we are only beginning at all adequately to realize. But it is a life, an experience—only immeasurably above and beyond our own. It contains or constitutes the conditions of our experience; but the conditions which it imposes are no other than the conditions under which we must advance in our participation in it. Reality is not indeterminate; it is rather the fully determinate. But it is void of meaning for us except in proportion as we make it ours—or make ourselves more of reality. And it is only by being influenced by the nature of reality, through openness or responsiveness to it, and by trusting to and venturing upon the suggestions and aspirations which shape for us, in advance of fuller experience, its character and its infinitely diversified features, that we can, in any measure, livingly or experientially make it our own.

CHAPTER X

CONCLUSION: THE CHARACTER OF THE PHILOSOPHY OF EXPERIENCE

The aim of English philosophy has been to conceive and establish knowledge in such wise as to unite the distinctive nature of philosophy with the general marks and the particular conclusions of the sciences. It has sought to do this by instituting a single method for all knowledge alike, and making the distinctions between different inquiries concern not so much the nature of their general procedure as the point of view they severally adopt in dealing with a common material—the range of their outlook or the special base of their operations. Beginning with the indifferentiation of philosophy and science, or their distinction only as the more and the less fundamental portions of a single investigation, the development of English philosophy has brought out with increasing clearness the nature and import of this distinction and its implied relation. Concerned at first with articulating the method of knowledge in general, and treating philosophy as signifying the most general principles of this procedure or its most general applications, the development advances through phases which virtually identify philosophy with one or other of the special disciplines, conceived as amenable to the common method of science and differing from the other sciences only as supplying their general foundation and warrant, or else as a com-

plementary mode of inquiry undertaken from another standpoint than that of the sciences generally; and culminates in the conception of philosophy as universal knowledge—or the universe of apprehended truth—related to the particular sciences both as initiating and characterizing their inquiries and as systematizing their conclusions.

The means of this unification of philosophy and science has been taken throughout the development to consist in making the method of experience the one method of knowledge. Recognizing that scientific method is essentially experiential, English philosophy has insisted that the true method of philosophy is likewise experiential. And the evolution of English philosophic method has thus consisted in the progressive definition and application of what has been held, at its several stages, to constitute the experiential method in philosophy. At the outset this method is regarded as mainly implying faithfulness to fact through all the different spheres of knowledge, and a gradual and regular transition from fact to fact and sphere to sphere. Knowledge is thus conceived as a thorough and connected investigation of the whole field of experience, advancing by uniform process from carefully ascertained and well-established principles, and basing its remotest conclusions on what is fundamental and ultimate. But it soon becomes evident—it was implied from the first—that a stable and intelligible system of knowledge must be grounded on a critical study of the meaning and scope of knowledge itself. Accordingly, the experiential method in philosophy is considered equivalent to the application of the general method of science to ascertain the nature of the processes and evidences of knowledge. The next step is the conception that this critical inquiry, which is an essential

preliminary or counterpart of the work of the sciences, cannot be merely on a level with other inquiries, but rather gives to these their whole significance as conveying a certified knowledge of reality. Lastly, it appears that the fundamental inquiry is the application of the common method of knowledge to experience in its widest extent and at its deepest level, in contradistinction to limited views of its content adopted for special purposes ; and that only in this way can the distinction and relation of knowledge and reality, as well as their several forms and grades, be made manifest.

But from the very beginning of the development there has gone the further thought, that the true method of experience was to be gained by getting rid of assumptions that had grown up in the course of knowledge and prevented a clear and unobstructed view of the facts. Thinker after thinker not only maintains that a proper method is the great desideratum for the establishment of a sound body of truth, and that the only proper method is that of experience, but contends further that the start from experience consists in the renunciation of prepossessions and the beginning anew from consciousness as the only source of knowledge—from its clear and distinct content, or not this alone but the vaguer feelings and intuitions that surround or accompany it. Whether this contention takes the form of an animadversion on all preconceptions and theories, as being unwarrantable obstacles to the attainment of truth, and thus verges on denying the need and disowning the use of hypotheses, or consists in emphasizing rather the need of precision and tenacity in the employment of them ; and again, whatever is the exact nature of the assumptions discarded and retained at different steps in the development, and the precise view that is taken of the influence of pre-

suppositions in determining the character of any particular inquiry ; the principle is the same—that, if our method is to be adequate to its task and our philosophy is to be truly experiential, we must get behind the conceptions which we habitually employ for the interpretation of experience, see them in their origination and proper setting with reference to our experience as a whole, and ground on this insight our endeavour to establish a coherent system of truth.

Again, while the connexion of the different sciences has been variously sought in common or universal principles suggested by analogy or proved by the applicability of a uniform mode of explanation ; in the general character of knowledge as the common medium of their inquiries ; and in their relations to one another as expressing different degrees of abstraction from the concrete reality of experience ;—in each case the correlation (and, as founded thereon, the application) of the sciences has been regarded as an essential feature or an integral part of the method of knowledge.

There are thus several distinct but connected lines on which the development of English philosophic method has proceeded—the differentiation and integration of philosophy and science, the explication of the experiential method, the rejection of irrelevant presuppositions, and the interconnexion of all inquiries as portions of a single whole. And these lines converge to suggest a total view of philosophy and its method as the outcome of the development. How then can we state this outcome, and so express the result of our study of philosophic method ?

The one method of knowledge is the method of experience. Any other alleged method is got by abstracting some feature from its nature and using this instead of

the method as a whole. Conceptions that have arisen in the process of interpretation of experience may come to be treated as though they had an independent nature and origin, and be made the basis of a procedure which is, explicitly or implicitly, opposed to that of experience; just as, conversely, experience may be regarded in a way that prevents the procedure from being adequate to the expression of its true character. Partial or limited views of experience, and the elevation of some particular concept or another into a universal principle of interpretation, are correlative deficiencies which are equally prejudicial to sound knowledge. But, in either case, the immanence of experience itself—its presence as ultimate source and final test of the whole procedure—inevitably impels such abstractions towards concretion. From whatever feature or aspect of experience we set out, the quest of knowledge at length necessitates our going back to its original starting-point, as the only guarantee of reaching efficient results and securing permanent progress. Thus all methods, on whatever consideration they are founded, and whether the inquiry be general or special in character, are seen to be portions of the one comprehensive method of experience. Whatever distinctions are introduced into the unity of knowledge are themselves an outcome of the method of experience; and the way in which these differences are to be again reconciled must be found in the same source. The general proof that this is the only method is, then, that the very means of adopting any contradistinguished method are themselves due to it; and that nothing short of it can satisfy the requirements of a thoroughgoing and unencumbered pursuit of truth. When this is once recognized, the problem of method resolves itself into the question of the precise nature of the experiential method, with the implied question of its

relation to the separation of knowledge into distinct and partially independent inquiries, and its significance for the task of their reunion.

The experiential method, as the common method of knowledge, is (in its most general character) the observation or notice—passing, through combined analysis and synthesis or discrimination and relation, into interpretation—of experience, and thereby of reality as what is contained or implied in experience. This does not mean that the nature and content of experience are given in or to consciousness prior to the work of knowledge, just as they are afterwards taken up into knowledge. Rather does it mean that both the distinctions and the connexions—indeed the whole character and meaning of experience—arise into consciousness in the effort to interpret it. It implies, that is, that experience itself has always these two aspects of interpretation and a somewhat interpreted, and that knowledge is just that feature of it in which reality acquires a definite nature and significance for us. Accordingly, investigation is never a mere contemplation of accredited facts, but has always in it something of the nature of an experimental search, or the trial of a suggested mode of conceiving fact. And only through its application in detail can the precise character of any principle of interpretation itself be made manifest. This truth is enforced by the practical reference of knowledge. Indeed, from the methodological point of view, the distinction between theory and practice —which is, taken generally,[1] that between 'looking upon' and 'going through' an experience—is simply that between a principle and its details, or the general and the particular aspects of a determinate line of action

[1] And etymologically, these being the root-meanings of θεωρία and πρᾶξις respectively.

or course of inquiry. Vision or insight is requisite, if any process of experience is to be aught but blind groping or unthinking routine. But only acquaintance with actuality, or the intimacy of individual contact with life, can exercise any effective *re*vision on our speculations and projects. Thus knowing and doing are correlative factors in every advance of experience. Still further, the entire process of suggestion and verification—which, alike in the detailed procedure of the sciences and as an expression of the movement of knowledge generally, constitute the alternate and complementary phases in the acquirement of truth—is possible, in the last resort, only by virtue of an impulse towards experience that lies beyond already accomplished fact, an *instinct* (one might say) of fuller reality. This is the true *nisus* of our consciousness. Thus all determinate forms of apprehension and ideals of conduct become such only through their functioning in the development of concrete experience. And the method of experience is that which treats all ideas and principles—all conceptions of the nature of reality or the meaning of life—as emerging from, and again passing into, the continuous movement of life itself.

From this general statement we can pass to the nature of the experiential method as itself giving rise to the distinction of different inquiries and the mode of their unification. Interpretation of experience gradually differentiates it into a variety of features or aspects, each of which, when once it is definitely apprehended as a factor in the characterization of reality, may and does become the basis of a more particular investigation dealing with reality only from that standpoint. Experience is thus differentiated into consciousness and existence, subject and object, mind and matter, knowledge and will,

and so forth, making possible a whole complex scheme of inquiries ever dividing and subdividing into more detailed studies. Such discrimination of viewpoints involves a certain specialization of method as well as of subject-matter, and in its actual working partakes of that more or less explicitly selective character which belongs to knowledge generally. It initiates definite questions and gives a precise import to whatever answers are forthcoming.

It is commonly recognized that the separate sciences are each based on some fundamental notion or presupposition, which defines and limits the sphere of its investigation. Thus, geometry presupposes and is limited by its reference to space ; physics has matter and motion for its province ; psychology is concerned with mind or consciousness ; and so on. But it is not so generally recognized that each of these concepts and spheres is got by separating off in our reflexion on experience some feature or aspect of its content (or its character) as the basis of specialized and detailed inquiry. Apart from this the special sciences would be devoid of significance, and indeed could never have arisen or been conceived as the separate sections in the scheme of knowledge. It is only on account of its having a prescribed sphere on the basis of a definite postulate concerning reality, that any science is enabled to proceed with its own investigation in separation from others, while yet holding its results combinable with those of the other departments of knowledge ; and it is only because of its underlying presupposition, and the sense (however vague and general) that this has a determinate place in the scheme of knowledge and in the interpretation of reality, that any particular inquiry can be taken as affording and promoting *knowledge* at all. The aspect of distinctification and postula-

tion gives it a specific content ; that of correlation and potential application gives this a definite value. Each of the special sciences, therefore, is inherently and inevitably hypothetical or presuppositional. It secures definiteness in its conclusions, and at the same time becomes instrumental in explicating and thereby advancing experience, only through accepting, either as already specified or else without precise specification, the relation of its own particular sphere of reference to others. Only so can it claim to constitute even a partial expression of truth.

But *philosophy* can admit of no unexamined presuppositions.[1] It cannot assume, for example, either that experience is essentially subjective as being only an occurrence in an individual consciousness, or that it is intractably objective as implying something altogether independent of the consciousness of the subject ; nor can it assume that all experience is fundamentally of the nature of knowledge or awareness, or again of effort or will ; nor treat it either as wholly determinate or as wholly indeterminate in ultimate content. It must start from experience without such assumptions and allow these distinctions and the implied connexions to emerge in the course of the interpretation of experience. Accordingly, philosophy begins at a point further back or deeper down than any of the special sciences : it is the prerogative of philosophy and a character that differentiates it from all other disciplines, that it seeks to begin at the beginning in the investigation of reality.

No doubt the sciences also return upon their pre-

[1] Whatever is taken for granted in philosophy is to be held provisionally, not finally ; or else held as requiring and not as constituting an explanation.

suppositions to examine and criticize them. It is part of their procedure not only to view all reality in the light of their several assumptions, but also to reconsider the character and working of these assumptions in the light of the results obtained. This is a means both of distinguishing and of connecting allied inquiries. But no special science, as such, goes behind its basal concepts and methodological postulates and seeks to determine their place in the scheme of knowledge. It is the task of philosophy to inquire into the meaning, the position, and the relations of the concepts on which the sciences are based ; and this it does, and can only do, by showing their points of departure and consequent import in the interpretation of experience as a whole.

But philosophy not only begins at the beginning, it goes on to the end. Any of the special sciences, as such, although following out its own investigation to the furthest limits, is precluded by its own nature and procedure from uniting its results with those of other sciences into an intelligible system. It is the function of philosophy not only to examine and criticize the presuppositions of the sciences, but also to unify their conclusions so as to construct a system of knowledge. This it does in virtue of the place assigned by it to the results of the several sciences on account of their respective presuppositions. Only in view of the relations that obtain between the ultimate concepts and assumptions of the various sciences, as each respectively defining the point of view from which experience is considered and reality investigated, can the results of the sciences be systematized so as to show their significance for the interpretation of experience and of reality as a whole. No doubt, as before, the established results of the sciences react on the scheme of knowledge and help to determine their own ultimate

significance. But they do so only by mutual adjustment and readjustment, and the final say is the prerogative of the entire system of knowledge.

Accordingly, while philosophy and science have a common method, there is nevertheless a difference in their mode of procedure and the character of their undertaking. The method of philosophy, as well as of science, is the experiential method. But by beginning at the beginning and going on to the end, philosophy stamps itself as having a differentiating character of its own, which is not adequately expressed even by defining it as the system of the sciences or the systematization of science—unless we recognize that this involves that it logically precedes as well as follows them, and that its systematization of their results is no mere generalization or summation, but a reconstruction by reference to their import and relations within the totality of our experience. The character of any philosophical system or reconstruction is determined by its conception of the fundamental nature of experience, and of the order and connexion of the various planes or levels (so to call them) at which experience is taken in the several sciences, and the relations, therefore, that obtain between their particular aspects of reality. It is essentially a specific *re*interpretation of the content and import of experience, scrutinizing the purport both of particular conclusions and doctrines and of the general principles or interpretative conceptions which it avows or disavows, and involving at once extensive knowledge of detail and penetrative insight or intuition. Philosophy thus consists distinctively in the *unconditional* or *thoroughgoing* employment of the method of experience.

Indeed the philosophical method is peculiarly experiential in its character. For not only does it seek to take

nothing for granted and yet to leave nothing out of account, but further—what is implied in this and gives it its chief significance—philosophy alone treats experience in a way that tends to conserve its concrete actuality ; since any inquiry that begins with an assumption or postulate that contracts its sphere, involves an abstraction (however hypothetically taken and methodologically needful) from the truth that is appreciable only at the central standpoint. This is what explains, and alone can justify, the claim that philosophy gives a knowledge of reality as it truly is, whereas the sciences can tell us only what it appears to be from particular points of view. But the appearances are (here as in reference to the character of knowledge generally) the very stuff and nature of a knowledge of reality. Fully definite knowledge is obtainable only through abstraction, the infinite character of reality precluding any but partial viewpoints for its articulation in distinct and precise concepts. Yet all knowledge becomes possible only through the endeavour to express the nature of reality as it actually constitutes our total or concrete experience. Even if we cannot get any single viewpoint for expressing reality which is that of our experience as a whole—any unitary point of view for our outlook on existence ; that is, although only the abstract aspects can be definitely apprehended and not their concrete unity—it is none the less true that it is only the concrete experience that is our warrant for distinguishing and relating the several aspects which, though each is by itself an abstraction, together constitute the whole. The experiential character of philosophy thus signifies the intimacy of its quest for truth with *the actual life of experience itself*. That in its quest of an ultimate or universal mode of interpretation it should never be a complete achievement, but always a pursuit

and a problem, only indicates more fully the experiential nature of the task.

Neither philosophy nor science alone, then, can yield the truth : together they are competent, apart they are impotent. Without some tentative scheme of knowledge suggested by a more or less explicit and more or less adequate attempt to get an initial or fundamental standpoint, as point of departure in the investigation of reality, the particular sciences could never get to work at all on their detailed inquiries ; and apart from reconstruction on the basis of such a scheme their conclusions would have no determinate meaning and value. By its effort to construct a system of truth philosophy acts both as a spur and a guide to the special inquiries, ever suggesting further goals for research and pointing the way towards fuller knowledge. But the dependence is reciprocal. For without the particular inquiries the general outline would get no definite or concrete content. Moreover, the scheme of knowledge and the systematized conclusions must be tested by the further working of the sciences on the lines which the system suggests. A system of philosophy is thus a scheme of the sciences, obtained by determining the nature and relations of their respective viewpoints for the interpretation of reality, and a conspectus or connected view of their conclusions in accordance with it. Philosophy by itself can yield no full and definitive answers to the problems which it raises. But it *sets* the problems and so can estimate the significance of any answer that is proffered ; and on the basis of results so far attained it can, at each stage, indicate the forms which the problems now assume and the lines of their further solution. And any system of philosophy is valuable just in proportion to the thoroughness of its analysis and the comprehensiveness and suggestiveness of its synthesis.

There is thus a methodological relation between the critical or regulative and the constructive or constitutive functions of philosophy—the former logically preceding and initiating the work of the sciences, the latter following and comprising them—corresponding to that between the inductive and deductive phases of scientific procedure, between the suggestion and verification of hypotheses, or again between the observational and experimental aspects of inquiry. The experiential method, in philosophy as in science, is at once analytic and synthetic, and combines the tentative character of discovery with the evidence or proof that attaches to system.

The significance of the experiential method, as the method of philosophy, is therefore, in the first instance, that it involves a community of procedure underlying the differentiating features and the distinctive functions of philosophy and science, enabling them together to exhibit the character of *progress and infinality* as pertaining to all knowledge in its work of interpreting reality. But further, as is shown by a study of the development in outcome or content which is coincident with the development of method in English philosophy, the philosophy of experience is alone fitted at once to justify and to reconcile the various distinctions, and to transcend the provisional abstractions, that are made during the course of knowledge. As it does not start with the distinction (expressed or implied) between experience and reality, between knowledge and existence, between mind and matter—but leaves these and every subordinate distinction and their implicated relations, along with the determinate problems which they raise, to emerge in and through the work of interpretation itself—it puts us on the only right path for seeking and furthering the solution of the problems.

Insisting from the outset on experience as the source of our knowledge of reality, English philosophy has passed through various phases marked by modification of view as to the *nature of experience*. In especial, the development has been ever towards a more concrete view of its nature. In this way there have been progressively surmounted various assumptions, which are incidental to the initiation and the working of this or that specialized inquiry, but are irrelevant and even erroneous when admitted as uncriticized presuppositions into the consideration of the general character of experience and the ultimate meaning of reality, which is the province of philosophy proper. Thus fact and idea, sense and thought, intellect and will have each, in more or less explicit antithesis to one another, constituted the distinctive basis of the procedure and conclusions at different stages of the development ; and the general line of progress has been in the direction of their adjustment and correlation.

With advance in the conception of knowledge and its precise relation to experience has gone a progressive *integration of experience and reality* — yet withal a *differentiation* of them signifying the contrast between actual and possible attainment. Although at first only a latent implication of the experiential method of knowledge, and historically a matter of gradual recognition, the true import of the fundamental principle of English philosophy—the principle of experience—is not simply that reality can be known only through the medium of experience, but that reality *is* experience. But the significance of this result lies not in any mere apprehension of its truth or validity as a general principle of interpretation, but in what it means for the development of our experience itself. For while reality consists in experience, and not only in existence that must be apprehended by

way of experience, this involves that it can be realized in or for our consciousness only by way of a progressive appreciation which actively or livingly participates in it. Thus experience is at once the starting-point, the pathway, and the goal in the search for reality. The experiential philosophy is ultimately inseparable from the life of entrance into the being and nature of the infinite reality.

The spirit of English philosophy has all along been that of practicality of aim and infinality of achievement. Always tentative and limitary in its tone with respect to actual or definite results, it has sought experimentally, by cautious suggestion and the thorough testing that comes through accurate research and from application to action and conduct, to gain a fuller apprehension of true existence. On the insight of individual thinkers into the significance of their own and the common life, along with an increasing community of work and an advancing consensus of accepted truth, depends the further development of the philosophy of experience.

INDEX

Abbott, E. A., 15 *n.*
Adamson, R., 1 *n.*, 135 *n.*, 201 *n.*
Aristotle, 2, 19, 34 *n.*
Avenarius, R., 186 *n.*

Bacon, F., 4, 8 *ff.*, 22 *ff.*, 43, 162 *ff.*
  doctrine of method, 8-9, 22-35, 43, 165
  —— of 'idola,' 26-8
  conception of philosophy, 13-21
  use of analogy, 14-7
  —— of hypothesis, 30-5
  connexion of the sciences, 11 *ff.*, 17-20
  knowledge and utility, 9-11, 28-9, 162-5
Bain, A., 100 *n.*
Bax, E. B., 181 *n.*
Bergson, H., 133 *n.*, 173 *n.*
Berkeley, G., 4 *n.*, 50, 55-6, 63 *ff.*, 87 *n.*, 112-3, 136 *n.*, 147, 168-9
  doctrine of matter, 63-6
  —— of mind, 66-9
  conception of 'notions,' 55-6, 67
  knowledge as symbolism, 69, 168-9
Bosanquet, B., 34 *n.*
Boyle, R., 59 *n.*
Bradley, F. H., 42 *n.*, 75 *n.*, 135 *n.*, 155 *ff.*, 174-5, 181 *n.*
  knowledge and reality, 155-7, 174-5
  reality as experience, 157-9
  theory and practice, 175
Brown, T., 95, 96 *n.*, 99, 117
Butler, J., 171 *n.*

Caird, E., 152 *n.*
Comte, A., 13 *n.*, 17 *n.*, 129

Descartes, R., 2, 4, 13 *n.*, 27 *n.*, 28 *n.*, 58 *n.*, 59 *n.*, 173 *n.*
Dewey, J., 176
Douglas, C. M., 102 *n.*, 169 *n.*

Ellis, R. L., 16 *n.*, 164 *n.*
Erdmann, J. E., 3

Ferrier, J. F., 3 *n.*, 95, 102 *ff.*, 123-4, 135 *ff.*
  conception of philosophic method, 102-4, 108-9, 138-9
  theory of knowledge, 104-5, 135-8
  —— of ignorance, 123-4
  —— of being, 105-6, 136
  sense and thought, 107, 137
Fischer, K., 12, 15 *n.*, 164 *n.*
Fraser, A. C., 180 *n.*

Galilei, G., 34 *n.*, 59 *n.*
Green, T. H., 136 *n.*, 147 *ff.*, 195 *n.*
  knowledge and reality, 147-51
  —— and feeling, 151-3
Grote, J., 115 *n.*, 139 *ff.*
  conception of philosophic standpoint, 139-42
  knowledge and existence, 141-3
  immediacy and mediation of experience, 143-7

Hamilton, Sir W., 5 *n.*, 83 *ff.*, 96, 114 *ff.*, 119 *ff.*, 125 *n.*, 172
argument from 'consciousness,' 87-8, 93-4
doctrine of method, 93-5, 96
—— of qualities, 115-6
—— of the unconditioned, 119-21
knowledge and belief, 120, 172
Hartley, D., 96
Hegel, G. W. F., 3 *n.*, 67 *n.*, 183 *n.*
Hobbes, T., 35 *ff.*, 45 *ff.*, 53, 96, 164-5
doctrine of method, 35-44, 165
conception of reasoning, 38-41
interpretation of experience, 46-7
Hobhouse, L. T., 89 *n.*, 145 *n.*, 201 *n.*
Hodgson, S. H., 145 *n.*, 172 *n.*, 185 *ff.*
conception of philosophic method, 186-9, 196, 197-8
analysis of experience, 189 *ff.*
distinction of subject and object, 189-90
relation between mind and matter, 192-5, 198-204, 205-9
nature and origin, 187, 191-2, 201-2, 204-5
knowledge and practice, 209-10
Höffding, H., 27 *n.*, 34 *n.*, 59 *n.*, 96 *n.*, 181 *n.*
Hume, D., 4 *n.*, 50 *ff.*, 54-5, 69 *n.*, 70 *ff.*, 83, 113, 147, 169 *ff.*
conception of philosophy, 50-3
criterion of knowledge, 70-1
criticism of causality, 72-3
—— of substance, 73-4, 113
—— of relations, 71-2
presupposition of his philosophy, 75-8
its outcome, 78, 83, 113, 169-70
Hutcheson, F., 82 *n.*

James, W., 77 *n.*, 143 *n.*, 152 *n.*, 173 *n.*, 176, 180 *n.*, 207 *n.*
Jevons, W. S., 33 *n.*
Joseph, H. W. B., 34 *n.*

Kant, I., 2, 4 *n.*, 51 *n.*, 56, 67 *n.*, 69 *n.*, 92 *n.*, 170 *n.*, 172 *n.*, 204 *n.*
Kepler, J., 34 *n.*

Leibniz, G. W., 4 *n.*, 72 *n.*
Lewes, G. H., 1 *n.*, 24, 25 *n.*
Locke, J., 48 *ff.*, 53 *ff.*, 77 *ff.*, 96 *n.*, 110 *n.*, 112, 165 *ff.*, 173
character of his inquiry, 48-9, 78-9
conception of experience, 54-7, 77
doctrine of qualities, 59-60
—— of substance, 60-1, 112
material and process of knowledge, 56-7, 62-3, 79, 166-7
knowledge and probability, 53, 167-8

Mansel, H. L., 120 *n.*, 172 *nn.*
McTaggart, J. E., 160 *n.*, 181 *n.*
Mellone, S. H., 154 *n.*
Mill, James, 95, 96 *n.*, 99 *n.*, 100 *n.*
Mill, J. S., 20 *n.*, 33 *n.*, 40 *n.*, 87 *n.*, 95 *ff.*, 117 *ff.*, 169 *n.*
doctrine of method, 96-8
—— of matter, 99-100
—— of mind, 100, 117-9
Moore, A. W., 167 *n.*

Newton, Sir I., 34 *n.*

Plato, 2
Pringle-Pattison, A. S., 56 *n.*, 58 *n.*, 89 *n.*, 92 *n.*, 115 *n.*, 125 *n.*, 151 *n.*, 180 *n.*

Read, C., 208 *n.*
Reid, T., 5 *n.*, 82 *ff.*, 114-5, 171-2
criticism of 'ideal theory,' 83-5, 88-9
doctrine of qualities, 85-6, 114-5
—— of suggestion, 86-7
—— of intuitive principles, 90-2, 114

Reid, T., methodological position, 82, 92-3
Robertson, G. C., 45 *n.*
Royce, J., 160 *n.*, 178 *n.*, 204 *n.*
Russell, B., 40 *n.*

Schiller, F. C. S., 176, 207 *n.*
Sidgwick, H., 105 *n.*, 130 *n.*
Smith, N., 2 *n.*, 58 *n.*, 173 *n.*
Socrates, 2, 8
Spedding, J., 26 *n.*
Spencer, H., 121 *ff.*, 128 *ff.*, 152 *n.*, 172 *n.*, 173 *n.*
  doctrine of the unknowable, 121-3
Spencer, H., philosophy as a system of the sciences, 128-33
Spinoza, B., 27 *n.*, 96 *n.*
Stewart, D., 83, 88, 96 *n.*
Stout, G. F., 143 *n.*, 151 *n.*, 178-9

Taylor, A. E., 181 *n.*, 186 *n.*, 204 *n.*

Venn, J., 34 *n.*

Ward, J., 179 *n.*, 204 *n.*
Webb, T. E., 51 *n.*, 57 *n.*
Whewell, W., 33 *nn.*
Wundt, W., 160 *n.*

THE END

BILLING AND SONS, LTD., PRINTERS, GUILDFORD

Date Due

3/5/57

Library Bureau Cat. no. 1137

B
1111
F735

AUTHOR

Forsyth, T.M.

3431

TITLE

English philosophy.

DATE LOANED	BORROWER'S NAME
11-29-54	Lettering
2/5/57	Millard Ende
3/5/57	RENEW